

UCLA COLLEGE

REPORT

A showcase of the
people and progress
from letters and science
in the UCLA College

FROM THE EXECUTIVE DEAN



It has been an honor for me to assume leadership of the UCLA College. After four months as executive dean of the College, I'm more enthusiastic than ever about working for the largest and most comprehensive academic unit in the University of California system.

Leading the College is an extraordinary challenge, but the opportunities to create excellence in teaching and research are tremendous. The College serves as the core of the liberal arts tradition at UCLA; by continuing to strengthen the depth and breadth of quality in the College, we can ensure that UCLA remains among the premier research universities in the country.

I am particularly enthusiastic about the “Ensuring Academic Excellence Initiative” that was launched by Chancellor Albert Carnesale in June. This initiative identifies \$250 million for new scholarships, graduate fellowships and endowed chairs as top priorities for the campus, to ensure that UCLA continues to attract the finest faculty and students. A large part of that support will come to the College.

Throughout this publication, you'll see examples of how the type of support to be raised through the “Ensuring Academic Excellence Initiative” will affect the College—impact that is illustrated by faculty and students conducting research made possible only because of endowed funds (page 5), or the long-term benefits of a gift that is helping to create a new generation of scientists (page 22), or how several bequests are supporting an academic program in the humanities that is unique to UCLA (page 30). These examples vividly demonstrate the potential for how the College can excel and grow with new sources of funds.

I hope you find these stories as compelling as I do. I welcome your reaction. Please write to me at pobrien@college.ucla.edu.

Cordially,

A handwritten signature in black ink, appearing to read "P. O'Brien".

Patricia O'Brien
Executive Dean, UCLA College

UCLA COLLEGE

REPORT

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UCLA COLLEGE

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On the cover: A detail from the renovation work on the Humanities Building, formerly known as Kinsey Hall, one of the original buildings on the UCLA campus. See page 3. Photo by Reed Hutchinson.

College News

An update of events and progress in the UCLA College

Emil Reisler: Working to Bring Together An Extraordinary Range of Interests

A long-time academic leader and biochemist has been named dean of life sciences in the UCLA College.

Emil Reisler, a faculty member at UCLA for 25 years whose work explores the functioning of proteins at the molecular level, has been named dean of life sciences in the UCLA College.

Reisler's appointment took effect July 1. He had served as acting dean of life sciences, a role he assumed with the retirement of Dean Fred Eiserling in December 2003.

Reisler will also be senior associate dean for life sciences in the David Geffen School of Medicine at UCLA.

"The interests of faculty and students in the life sciences often extend well beyond traditional academic boundaries," said Albert Carnesale, chancellor of UCLA. "As a biochemist and molecular biologist, Emil brings a strong appreciation of collaboration among many disciplines which is crucial to the flourishing of the life sciences."

Reisler joined the UCLA faculty in 1976. His research and teaching focus on understanding the molecular-level functioning of proteins, and their interaction in motion and force generation in muscle and non-muscle cells. His work has been supported by grants from the National Institutes of Health, the National Science Foundation, Muscular Dystrophy Association and the American Heart Association. He received the Hanson-Dow Award for Excellence in Teaching from the department of chemistry and biochemistry in 1995.

Reisler has been an academic leader of the UCLA department of chemistry and biochemistry, serving as vice chair from 1989 to 1991, and chair from 1997 to 2001.



Emil Reisler

Before assuming the role of acting dean, he had been associate dean of life sciences from September to December 2003.

"The life sciences bring together an extraordinary range of interests, from research and teaching about the smallest elements of a living system to the life of cells, the complexity of brain function and the most diverse ecological phenomena on Earth," Reisler said. "Life sciences are especially challenging and exciting, as new technologies and interdisciplinary interactions expand the scope of our fields and accelerate discoveries."

As a biochemist and molecular biologist, Emil brings a strong appreciation of collaboration among many disciplines which is crucial to the flourishing of the life sciences.

Several of UCLA's highly ranked academic programs are in the departments of life sciences: ecology and evolutionary biology; microbiology, immunology and

molecular genetics; molecular, cell and developmental biology; physiological science; and psychology. The life sciences include 5,500 undergraduates studying in nine academic majors, 140 faculty, 500 graduate students and several interdisciplinary research units.

"Emil is a superb scientist and a marvelous administrator," said Patricia O'Brien, executive dean of the UCLA College. "He is a strong advocate for the life sciences, and for building toward new advances and imaginative alliances in these critical fields of study."

College Awards Dinner for 2005 set for March 21

Coming soon will be your invitation to the College Awards Dinner, which for the 2004-05 academic year will be held on March 21, at the Beverly Hills Hotel.

This event celebrates the achievements of outstanding students and honors special friends who have made extraordinary contributions to the College over the years.

Funds raised through the College Awards Dinner provide critical support for undergraduate and graduate students, and faculty recruitment and retention efforts.

This year, the College will honor Lloyd Cotsen as its Honorary Fellow, for his leadership as a philanthropist and volunteer. Six students are honored with the Charles E. and Sue K. Young Undergraduate Awards and the Young Graduate Student Awards, which were established through the generosity of Louis and Evelyn Blau in honor of UCLA's former chancellor and his late first wife.

For more information about the College Awards Dinner, call (310) 206-1953.



Photo: Robin Weisz

Transformation of a Campus Cornerstone

One of UCLA's four original buildings begins the transformation into a home for humanities programs.

One of UCLA's oldest buildings is emerging as a haven for the humanities. Renovations have begun for the Humanities Building, formerly known as Kinsey Hall, one of the original campus structures. The facility, first called "the Physics-Biology Building," occupies the southeast corner of the original campus and is part of a quartet with Royce Hall, Powell Library, and Haines Hall that were constructed for the opening of the Westwood campus 75 years ago.

Since 1963, the building has been known as Kinsey Hall, named for former Physics Department Chair Edgar Lee Kinsey. Many offices in physics moved to Knudsen Hall in 1964.

The opening in fall 2004 of the new six-story Physics and Astronomy Building completes the transition of many science programs into 120,000 square feet of new teaching and research space. With the move, the Kinsey name was transferred to the teaching pavilion connected to the south end of Knudsen Hall.

The erstwhile Kinsey Hall will undergo a two-year renovation, reopening in 2006 with a new name, new classrooms, and new offices for the Department of English, including a renovated reading

room made possible by a grant from the estate of Grace M. Hunt. It will also house other departments and programs in the Humanities.

"Given the core role that study in the humanities holds at UCLA, it is certainly fitting that many of our programs occupy one of the central buildings on our campus," said Gabrielle Spiegel, dean of humanities. "Our faculty, students, and staff eagerly await the opportunity to occupy this historic structure."

Renovation of the building will be funded by a combination of private gifts and public sources.



The three student journals published under the auspices of the College's Undergraduate Research Centers have been published for 2004.

The journals, created to showcase students' research and creative achievements, are: Aleph, the humanities and social science undergraduate research journal (shown here); Westwind—the UCLA journal of the arts; and the Undergraduate Science Journal. For more about the journals, see the Quick Links at the home page of the College's Undergraduate Research Centers, www.college.ucla.edu/ugresearch/index.html.

A Significant Step Forward for Asian American Studies

The interdepartmental program in Asian American studies has become an academic department—a move that allows faculty and students to strengthen its leadership in a flourishing field.

In October, UCLA celebrated the creation of the department of Asian American studies—"a significant step forward," said Social Sciences Dean Scott Waugh, "in the development of an academic discipline devoted to understanding an important segment of American society and culture."

UCLA has produced more scholars for the field of Asian American studies than any other university in the nation. It has also developed the largest Asian American studies teaching program in the nation, which annually offers more than 70 courses and enrolls more than 3,000 students.

"We are pleased we have attained departmental status to further strengthen our already rigorous academic programs, to continue leading the development of the field of Asian American studies, and to meet the increasing demand of our students and the larger Asian American community," said Min Zhou, department chair and a UCLA sociology professor.

The Asian American studies interdepartmental degree program was established in the UCLA College in fall 1976, although the center began offering classes in 1969. As an interdepartmental degree program, Asian American studies had to hire faculty jointly with an academic department.

Having departmental status will elevate the prestige of the degree for students, Zhou said, and enable the department to hire its own faculty.

The department also includes a Master of Arts program and two concurrent Master's degree programs with the community health sciences and social welfare departments.

UCLA was the first university in the nation to offer a graduate degree in Asian American studies and the first classes on the experiences of Cambodian Americans, Hmong Americans, Vietnamese Americans, Thai Americans, and gay and lesbian Asian Pacific Islanders.

"Not Your Grandfather's Columbus"

A massive UCLA project, 18 years in the making, recounts the life and times of Christopher Columbus—warts and all.

The visionary behind the project died before it began, the first publisher lost interest, and funding shortfalls persisted throughout.

In fact, the *Repertorium Columbianum* seemed even less inclined to reach its destination than its namesake, but the mammoth project has finally made landfall after 18 years.

Just in time for the observation of Columbus Day 2004, the 13th and final volume of the exhaustive compendium of Columbus-era documents rolled off the presses. UCLA's Medieval and Renaissance Center, sponsored the project.

"It often felt as if this day would never come," said Geoffrey Symcox, general editor of the project and a UCLA professor of history. "We're really proud of our work."

At 5,343 pages, the *Repertorium* puts in one place what Symcox describes as "the most significant contemporary sources bearing on Columbus," including: Columbus family legal records; Columbus' contracts with the Spanish crown; a collection of Biblical prophecies compiled by Columbus to argue his voyages were foreordained; and accounts of all four voyages by Columbus contemporaries, especially Bartolome de Las Casas, a Dominican friar critical of Columbus' treatment of indigenous people.

With participation from 22 leading Columbus scholars worldwide, the *Repertorium* is the most ambitious undertaking of its kind ever produced in English. But don't expect an idealized tribute to the explorer. The project, launched in 1986, paints a mixed portrait of the explorer responsible for sparking the first sustained encounter between Europe and the New World.

"Many of the unflattering documents about Columbus have been known for the last century or more, but nobody paid much attention to them until recently. To historians today this information is very important. It changes our whole view of the enterprise."

"This is not your grandfather's Columbus," Symcox said.

While giving the brilliant mariner his due, the collection portrays Columbus as an unrelenting social climber and self-promoter who stopped at nothing—not even exploitation, slavery or twisting biblical scripture—to advance his ambitions.

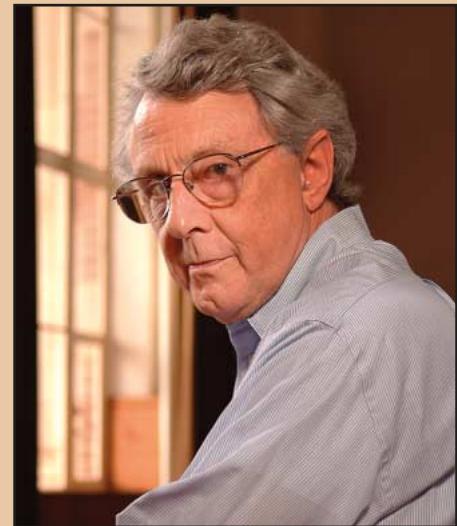
"Many of the unflattering documents about Columbus have been known for the last century or more, but nobody paid much attention to them until recently," Symcox said. "The facts that Columbus brought slavery, enormous exploitation or devastating diseases to the Americas were once seen as minor details—if they were recognized at all—in light of his role as the great bringer

of white man's civilization to the benighted idolatrous American continent. But to historians today this information is very important. It changes our whole view of the enterprise."

The brainchild of UCLA Italian historian Fredi Chiappelli, the project found itself without a director when Chiappelli suffered a stroke in 1989 and died before the first volume was published. Symcox, whose specialty is 17th- and 18th-century Italian history, stepped into the breach.

But by that time, the team assembled by Chiappelli had disbanded. So Symcox had to recruit new contributors, including Anthony Pagden, a UCLA professor of political science and history, and James Lockhart, a UCLA professor emeritus of history.

"Anybody who wants to do work on the encounter between the Old World and the New has to come to this series," said Teofilo F. Ruiz, the chairman of UCLA's history department and an authority on Renaissance Spain. "It's exquisitely done."



Geoffrey Symcox, professor of history and general editor of the *Repertorium Columbianum*.

College Faculty to Accompany Tours Through Alumni Travel

From the seclusion of the Russian countryside to the theatrical energy of the Oregon Shakespeare Festival, faculty from the College are leading travel programs hosted by the UCLA Alumni Association for 2004–05.

For the 63rd year, UCLA Alumni Travel is hosting programs to regions and events worldwide—and this year, 17 faculty from the College will share their special expertise along the way.

Among the Alumni Association trips for 2004–05 led by College faculty are study of village life in the Dordogne (Bonnie Taub, anthropology), a voyage along the Main-Danube canal (Claudia Rapp, history), journeys to the key regions of South America (Jose Moya, history), and exploration of Provence (Efrain Kristal, comparative literature).

"On a UCLA Alumni Travel tour, College faculty help make our trips dynamic, interactive learning experiences through presentations, on-site lectures, and informal one-on-one discussions that encourage the joy of learning and the excitement of discovery," said Christel Palet, director of alumni travel.

For more information about faculty-led tours offered by UCLA Alumni Travel, call (310) 206-0613, or visit www.uclalumni.net/travel.

“Ensuring Academic Excellence”:

Support for Faculty and Students Strengthens the Core of the UCLA College

By Judith Forman

The university’s new fundraising initiative will create benefits across the College—for faculty, graduate students, and undergraduates alike.

In June 2004, when UCLA Chancellor Albert Carnesale launched his “Ensuring Academic Excellence Initiative” to generate additional private support for faculty and students, he must have been thinking of people like Professor Sarah Morris and students Joseph Wang and Christina Topchyan—each of whom has benefited enormously from the generosity of UCLA’s donors and friends.

In response to decreasing support from the state of California and increasing competition from private institutions around the state and the nation, the new initiative seeks to raise \$250 million in private commitments over the next five years—beyond the already-established goals of Campaign UCLA—to strengthen the university’s ability to recruit rising young faculty members, attract and retain eminent professors, and draw gifted students to the university.

For the UCLA College, the most important elements of the new initiative are efforts to fund new endowed faculty chairs, and raise \$100 million for fellowships and scholarships.

“These substantial new resources will make a critical difference in the College’s ability to compete for top scientists, distinguished scholars, and talented undergraduate and graduate students,” said Patricia O’Brien, executive dean of the College.

Endowed chairs are a powerful means of attracting renowned faculty members to UCLA and keeping them on campus. With the supplementary resources provided by income from the endowment, chairholders can undertake advanced research, fund graduate and undergraduate student assistants, create new teaching initiatives, purchase equipment, and participate in academic discourse worldwide.

Sarah Morris, Steinmetz Professor of Classical Archaeology and Material Culture, came to UCLA in 1989 from Yale. “When a faculty position was advertised at UCLA, it just sounded like a wonderful opportunity for an archaeologist,” she explained. Twelve years later, she was appointed to the Steinmetz Chair.

Morris specializes in the archaeology of early Homeric and classical Greece, with a focus on ceramics and architecture of the classical world and also on the Bronze Age and its



Christina Topchyan, recipient of the Rudnick-Abelmann Undergraduate Scholarship in Physics.

prehistoric. Her current project involves investigation of a burial mound in ancient Illyria—now Albania.

"We started excavating it this summer and made our way through about 28 burials, and we've got more to go next summer," Morris said. "With the funds from the endowment we were able to pay nearly all of our expenses for the project. We were able to hire a photographer, pay the workers, fly many of the staff to Albania, and buy all of our supplies."

Morris believes the Steinmetz professorship has invigorated her work.

"The funds from the endowed chair have certainly inspired us to be more optimistic and aggressive about developing new field projects abroad that require outside funding," Morris said.

In addition, funds from the endowed chair help the program attract and support graduate students.

"We're competing with very wealthy, endowed universities for the best students. Stanford and Princeton routinely give their graduate students five years of full support," said Morris. "With the funds from the Steinmetz chair, we're able to supplement existing resources from the Graduate Division to make a competitive package for graduate students."

And the funds from the Steinmetz Chair extend the impact of outside support.

"Many people may not know that federal funding agencies such as the National Endowment for the Humanities award only matching funds," Morris said.

"Unless we can come up with half the money, we can't get federal funds. So having endowed funds locally that we can count on makes a huge difference. The Steinmetz endowment actually stimulates and brings in additional outside funding for UCLA."

The Steinmetz endowment also supports an annual lecture series that brings experts from abroad to present their research to the public and the campus community.

"The Steinmetz lectureship helped bring two of our colleagues from Albania to UCLA to lecture about the archaeology of Albania, which is little known outside of that country," said Morris. "We also invited the director of the documentation project for the Athenian Acropolis restoration to lecture at UCLA and the Getty a few years ago. So we've been able to bring in outside lecturers for special events that help publicize and inform the public about classical archaeology."

Outreach to Southern California public school districts is another important part of the Steinmetz Chair, and Morris speaks regularly at

local primary schools about archaeology and her own research. She pointed out that the Cotsen Institute of Archaeology also brings children to UCLA to attend its annual open house, and supports graduate student presentations in local schools.

"There's work that's not just confined to our research and our teaching, but to the function of UCLA as a member of a very large and vibrant urban community that's quite interested in archaeology."

The Steinmetz Chair is available to faculty members in art history, classics, history, and Near Eastern languages and cultures, in affiliation with the Cotsen Institute of Archaeology. It was established through a gift from the Steinmetz family in 1999.

Because of her own experience as the Steinmetz Professor, Morris is especially aware of the benefits that the Ensuring Academic Excellence Initiative will provide.

"I'm delighted that this initiative is a top priority for the chancellor," she said. "The University of California has always had the reputation for being a major research university that attracts the best researchers as well as the best teachers and that draws



Joseph Wang, winner of the Robert Ettinger Prize for Graduate Student Research.

graduate students from all over the world.”

Joseph Wang, a Ph.D. candidate in economics, clearly understands the importance of student support. Wang is a foreign student from Taiwan who received the Robert Ettinger Prize for Graduate Student Research for a paper he wrote that attempts to explain the practice of last-minute bidding on eBay, the world’s largest online auction company. The prize, established by economics alumnus Robert Ettinger, is awarded annually for the best papers completed by two UCLA third-year economics graduate students.

Wang’s wife, Ya-Ju Tsai, is a Ph.D. candidate in mathematics. The young couple chose to come to UCLA because they were both accepted into graduate programs here, and because Tsai was offered a departmental fellowship. As students, and as parents of a one-year-old daughter, the financial assistance offered by Tsai’s fellowship and Wang’s prize is invaluable.

But Wang’s prize meant more to him than just financial assistance.

“It also was an award for what I have accomplished, and encouraged me to pursue a career of serving others through research, teaching, or even personal donations someday,” Wang said.

Wang believes fellowships can free students from worrying about finances and allow them to devote their time to academic research. “It also encourages them to cherish and appreciate the opportunity to receive higher education at a lower cost and may influence them to serve others as they were served.”

Christina Topchyan, a recipient of the Rudnick-Abelmann Undergraduate Scholarship in Physics, could not agree more. Topchyan is a senior whose special interest, astrophysics, combines quantum mechanics and astronomy.

“The funds from the endowed chair have certainly inspired us to be more optimistic and aggressive about developing new field projects abroad that require outside funding.”



Seth Pevnick, a graduate student in archaeology, on the site of Lofkend, a burial mound in Albania, under excavation last summer by UCLA—work supported by funds from the Steinmetz Chair in Classical Archaeology and Material Culture, a professorship held by Sarah Morris (below).

“I came to UCLA because I considered it a highly prestigious and competitive university at an affordable price,” Topchyan said. “The Rudnick-Abelmann Scholarship has not only helped me financially, but it has also given me the confidence to continue my journey in this difficult field.”

Topchyan explained that although she has sometimes felt discouraged by adversity, “receiving recognition in the form of this scholarship has taught me that hard work and perseverance really do pay off. I’m grateful that there are people who care enough to offer financial and moral support to others.”

The Rudnick-Abelmann Scholarship was established through a gift from physics alumnus Ron Abelmann, and also honors late Physics Professor Isadore Rudnick.

The chancellor’s new initiative will enable UCLA to focus greater resources on its academic core of outstanding faculty like Sarah Morris, and promising students like Joseph Wang and Christina Topchyan. Endowed chairs, fellowships, and scholarships created through the support of visionary individuals and organizations can strengthen teaching and research, and provide a competitive edge that will ensure the academic excellence of the UCLA College.

To learn more about how to participate in the Ensuring Academic Excellence Initiative, contact the College development office at (310) 206-1953. 



Mining Language Strengths— Long Distance

A new program in the UCLA College links study of lesser-taught languages across the University of California system.

By Meg Sullivan

Timothy Tangherlini, who heads the Scandinavian Section in the UCLA College, has launched a project with UC Berkeley and UC San Diego that mines strengths in Nordic languages at different UC campuses for the benefit of the entire system.

Here's how "Distance Learning in Less Commonly Taught Languages" works: the UC campus with strength in any given language offers instruction in that language. For instance, UCLA has been offering courses in beginning Swedish or beginning Finnish, while UC-Berkeley, which is well known for Danish, teaches beginning courses in that language or advanced courses in Finnish.

Undergraduates enroll at the main campus, but report to class at their home campus. So Berkeley students might enroll in the UCLA Finnish course, which they then "attend" via a video-teleconferencing system that allows the Berkeley students to participate in proceedings in the UCLA class. The same procedure would work for UCLA students who hope to pick up Danish at UC Berkeley.

The goal is to strengthen enrollments to such a degree that these courses become economically viable for the campuses with strength in Nordic language instruction.

Ultimately, UC faculty envision a time when they will be able to offer upper division Nordic literature courses in the languages in which they were written. At that point, students will be able to savor such gems as Kierkegaard's 19th-century proto-existentialist masterpiece *Fear and Trembling* in Danish, Ibsen's 19th-century early feminist rallying cry *A Doll's House* in Norwegian, or Ingmar Bergman's dark classic film *Seventh Seal* in its original Swedish.

It's unusual for students at the receiving end of long-distance learning to report to an actual classroom —let alone participate in activities in the host classroom. Typically, in other programs, undergraduates attend class from home via a computer terminal, rarely in real time.

But when it comes to learning a language, Tangherlini argues, the conventional distance-learning approach just isn't useful because language instruction—arguably more than another kind of educational experience—relies on real-time give and take between the student and instructor.

"The instructor needs to correct grammar, and listen for mistakes in pronunciation and other subtleties," he explains.

Video monitors are actually rolled into the hosting classroom and the faces of students in the satellite section appear on screen. Transactions initially are stilted, Tangherlini concedes, but after a couple of meetings, the undergraduates forget the hundreds of miles that separate them.

"I saw UCLA students engaging in debates with a UC Riverside student in an upper division Scandinavian literature course that I offered last year," Tangherlini. "I was really surprised by just how fully students adapted to the technology." 



Timothy Tangherlini

Meg Sullivan is a senior media relations representative in the UCLA College.

Four Systems To Describe Human Motives

By Meg Sullivan

Anthropologist Alan Fiske's elegant but simple description of human behavior has spawned an interdisciplinary conversation that is shedding light on how the brain acquires, uses, and creates culture.



Alan Fiske

As a graduate student in anthropology, Alan Fiske should have been thrilled when he devised a way of neatly dividing all human interaction into four basic categories.

After all, it's unusual for a Ph.D. dissertation of even the most narrow scope to break important new ground. Fiske, meanwhile, had taken on a no less ambitious subject than the richness of human social life, and the work promptly drew comparisons to Marx and Freud for its breadth and elegance.

But for years afterward, he walked on pins and needles.

"Every time I gave a talk, I was convinced that people were going to stand up in the back of the room and say, 'But what about this fifth model and the sixth one and the seventh one that you've left out?'" Fiske, a UCLA professor of anthropology, recently recalled. "I was sure I was going to look like an idiot."

Nearly 20 years have passed since Fiske first suggested that relationships are either dictated by communal sharing, authority ranking, equity matching, or market pricing—and the other shoe has yet to drop. His 1991 book, *Structures of Social Life: The Four Elementary Forms of Human Relations*, a 480-page expansion of his dissertation as a graduate student at the University of Chicago, has become a classic of social science literature. Some 40 studies by 15 researchers have validated Fiske's "relational models."

"Alan is an integrative theorist of the first order," said Nick Haslam, editor of *Relational Models Theory: A Contemporary Overview* (Erlbaum Associates). "He's not afraid to go after big questions—such as the fundamental forms of social relationships—despite the increasing tendency for researchers to pursue highly specialized and narrow-focus topics."

Today, Fiske's models hold promise for illuminating dilemmas as complicated as ethnic tension and psychological maladies, yet the building blocks are strikingly simple:

- ♦ *Communal sharing* is the relational model in a romantic relationship or in a tightly knit team on the playing field or any other group of people who treat each other as socially equivalent in some respect.

- ♦ *Authority ranking* is the way a military command—or any other hierarchical organization—works.

- ♦ *Equity-matching* is the philosophy of turn-taking or even balance anywhere in society—on the playground, in baby-sitting co-ops, car pools, rotating credit associations, balloting—or even in vengeance.

♦ *Market pricing* is what people do when they buy and sell goods or services, when they allocate rewards in due proportion to contributions, or when they are concerned about efficiency or the ratio of benefits to costs.

"If you understand these four systems, you understand the basic human motives, emotions, judgments and ideas that govern social relations," Fiske said. "They form the basis of every aspect of human social behavior—from the exchange of goods and services to the organization of work and the social meaning of objects, land and time. They organize ideas about social justice, moral judgment, political ideology, religious observance and social conflict."

Different combinations of the four elementary types of relationships generate diverse cultures and complex social institutions in all domains of social life, Fiske contends.

"The point is that an incredible diversity of complex structures can be built out of a few elementary forms," he said.

Now Fiske, a mild-mannered and affable father of five, is trying to foster the kind of interdisciplinary spirit behind his relational models at the university he joined seven years ago. He was the founding director of UCLA's Center for Behavior, Evolution and Culture (BEC), which facilitates research and training on the interaction among natural selection, cultural transmission, social relations, and psychology.

Each Monday, the six-year-old center, now headed by UCLA anthropologist Joan Silk, attracts a standing-room only crowd with prominent speakers from anthropology, psychology, psychiatry, and communication. Scholars and students from more than two dozen departments across the campus participate. BEC also provides a framework for graduate training, but faculty dream of developing a more formal program and offering tuition support and seed grants for student research.

"The intellectual energy of BEC is unrivaled," said Robert Boyd, a professor of anthropology who helped found BEC with Fiske and Daniel Fessler, an

assistant professor of anthropology.

Sitting in on a BEC seminar four years ago helped University of Washington honor student Katherine Hinde choose UCLA over the three other top ranking graduate programs to which she had been admitted.

"The other campuses I visited weren't as good about getting people together from other disciplines to talk," said the third-year graduate student. "But at BEC we get amazing dialogues going."

Three years after BEC's founding, Fiske began to collaborate with UCLA neuroscientists to design a brain-imaging study that has identified the specialized neural mechanisms used to understand relational models.

Today, he heads the Center for Culture, Brain and Development at UCLA (CBD), a similarly interdisciplinary group of scholars who are also interested in fostering innovative and interdisciplinary research and training. Rather than focusing primarily on evolution as BEC does, CBD explores the interplay between culture, child development and neurobiology. The goal, Fiske said, is to shed light on the nature of a developing human being and how the brain acquires, uses, and creates culture.

The rigorous, interdisciplinary graduate program that prepares students to conduct integrated collaborative research in social behavior connects five graduate programs: anthropology, psychology, applied linguistics, neuroscience, and education. With funding from the Foundation for Psychosocial Research, CBD currently supports four post-doctoral fellows and provides scholarships for two of 12 graduate students affiliated with the program and provides a small amount of seed money for student research.

"If we had more money, we could admit more graduate students and the ones who come could spend less time in outside jobs and more time conducting research," Fiske said.

If anybody can attest to the value of graduate research, it is Fiske. The son of a psychologist, he fondly remembers the summer he discovered a striking similarity in the analyses of pioneers in three disciplines. Sociologist Max Weber, developmental

"If you understand these four systems, you understand the basic human motives, emotions, judgments and ideas that govern social relations. They form the basis of every aspect of human social behavior—from the exchange of goods and services to the organization of work and the social meaning of objects, land and time."

Andrew Shaner, clinical professor from the UCLA Neuropsychiatric Institute and the David Geffen School of Medicine, presents a program on schizophrenia in the weekly interdisciplinary lecture series hosted by the UCLA Center for Behavior, Evolution and Culture.



psychologist Jean Piaget and theologian Paul Ricoeur all saw human interaction in terms of the three categories Fiske would later call communal sharing, market pricing, and authority ranking. He had his first three elementary forms of social behavior.

Convinced that he needed to field test his theories, Fiske then set off for West Africa. In the highly ritualized threshing gatherings and multi-family cow slaughters of the traditional cultures in Burkina Faso, he witnessed a category of behavior for which he had failed to account: equity matching or turn-taking. He had identified his fourth category.

Returning to the U.S., he plunged into a review of research by more than 100 social scientists. “Surely,” he kept thinking, “someone’s already thought of this.”

But to his amazement, Fiske found researchers who had identified the equivalent of two or three of his relational models but not the rest. In the two cases where scholars identified the equivalent of all four models, they confined their theory to a small realm of human interaction—such as the workplace.

“It reminded me of the story about the blind men feeling the elephant,” Fiske said. “Everybody’s describing parts of this thing without realizing they’re all talking about connected parts of a whole.”

In fact, the relational models are so ingrained that people unconsciously use them to think about friends, family members, co-workers and acquaintances, research has shown.

Today research is showing that a wide range of stresses and strains in all kinds of social encounters may actually stem from unconscious differences in the way people employ Fiske’s models.

In a study of a Fortune 100 company, Debra Connelly, a Los Angeles scholar of business administration, found evidence that different assumptions about relational models explained long-simmering resentments and strife. Management, she discovered, entertained a communal view of employee relations. White women, meanwhile, had a very market-pricing ideal, wanting to be rewarded in proportion to their contribution. African-Americans wanted an equity matching relationship, and they were convinced that the company was not balanced and fair.

A growing body of research by Haslam, who is an associate professor of psychology at the University of Melbourne, shows that such personality disorders as paranoia, narcissism and obsessive-compulsion actually correspond with a tendency to over emphasize or under emphasize Fiske’s models. Narcissists, for instance, showed a low propensity for equity matching. Obsessive-compulsive people, on the other hand, showed a higher than normal reliance on authority ranking.

Fiske, meanwhile, is collaborating on a National Institutes of Mental Health-funded study to see whether relational model theory can help explain some of the problems schizophrenics encounter in living normal lives after medication has rid them of delusions and other symptoms.

“In order to function happily and to get along with people,” he added, “you have to coordinate with them by using the same relational models they’re using in the same ways. If you do, there’s going to be a lot of trust and strong relationships, and your social life can work very well.” **CR**

A Little-Examined Piece of the Cultural Mosaic

By Robin Heffler

In a new program created by the Center for Jewish Studies, scholars focus on the role of Jews in the evolution of Los Angeles.



Scenes of Jewish life in Los Angeles, from the 1870s (top) and the 1930s.

Harris Newmark was prominent in bringing the first public library and the railroads to Los Angeles. Isaias Hellman founded the fledgling city's first successful bank, Farmers and Merchants, contributed to its first institution of higher learning and precursor to Loyola Marymount University, and donated some of the land on which USC is built. And, Solomon Lazard owned the largest dry goods store in town, was a land investor, and helped to develop the first water delivery system.

In the 1860s and 1870s, all of these Los Angeles pioneers shared not only an entrepreneurial spirit and a vision of how the small town could grow and flourish, but also a cultural and religious heritage. Jewish immigrants from Central and Eastern Europe, they came to take advantage of the economic opportunities afforded by the California Gold Rush and the freedom to reinvent themselves that attracted so many others to the West.

These early residents left a legacy that included building the city's initial economic and social infrastructure, and playing leadership roles in a tiny Jewish community that 150 years later numbers some 650,000 in the greater Los Angeles area. Now, their contributions and the history of their fellow Jews in Los Angeles up to the present are the subject of a new research program being undertaken this year by the UCLA Center for Jewish Studies and the Autry National Center titled, "At the End of the West: Jews in the Cultural Mosaic of Los Angeles."

Creating a Dialogue Between Past and Present

"The Center for Jewish Studies is interested in sponsoring activities that bring the past into conversation with the present," said Professor David Myers, director of the Center, a scholar of modern Jewish history and coordinator of the program. "We want to carefully examine established notions about Jewish life in Los Angeles, and stimulate broader public debates about the ethnic and cultural fabric of our city."

The idea for the program stemmed from a call Myers received from Phil Blazer, president of Blazer Communications' Jewish Media Group, who was looking for expertise to create a television documentary on "The History of Jewish Los

"The project seeks to answer two primary questions: How has the Los Angeles Jewish experience been different from that of other American Jews, particularly those on the East Coast? And, how does the experience of Jews in Los Angeles compare to those of other ethnic groups in Los Angeles?"

Angeles.” The project tapped into Myers’ longstanding fascination with the dynamism and cultural, ethnic, and religious diversity of the Jewish community in Los Angeles. At the same time, he saw a partner nearby in UCLA History Professor Stephen Aron, who also serves as executive director of the Autry Institute for the Study of the American West.

In 2002–03, Autry mounted an exhibition on “Jewish Life in the American West” that drew considerable public attention during its seven-month run. “We were interested in doing a follow-up to that exhibit, which stopped in 1924 and barely looked at Los Angeles,” said Aron, whose research focuses on the American frontier. “We’re very excited about this partnership that brings academic expertise to the Autry and provides a public forum in which UCLA research can be translated for a much broader audience.”

Remarkably, there has been relatively little study of the history of Los Angeles’ Jews, the second largest Jewish community in the United States. “I think it may be in part because of the dominance of the New York model in describing how Jews entered American society, and in part due to the stereotypical view that Los Angeles lacks cultural and intellectual gravitas,” Myers said.

Differences from the East Coast Experience

Funded with the support of a “UCLA in L.A.” grant from the university’s Center for Community Partnerships, the project seeks to answer two primary questions: How has the Los Angeles Jewish experience been different from that of other American Jews, particularly those on the East Coast? And, how does the experience of Jews in Los Angeles compare to those of other ethnic groups in Los Angeles?

A partial answer to the first question can be gleaned from Karen Wilson, a UCLA doctoral student in American history and research assistant to Myers. She wrote the thesis for her 2003 Master’s degree from Hebrew Union College-Jewish Institute of Religion (Los Angeles Campus) on the history of the Jews of early Los Angeles, with emphasis on the impact of the Newmark, Hellman, and Lazard families.

“They and other early arrivals were well integrated into the social, economic, and political elements of the city, in contrast to the New York experience, where Jews gradually ascended in the general community,” she said. “In addition, while Jews flooded New York in the late 19th and early 20th centuries, their migration to Los Angeles was more gradual, often with stops along the way in places like Chicago.”



Doctoral student Karen Wilson and History Professor Stephen Aron (also executive director of the Autry National Center’s Institute for the Study of the American West).

Serving University and Community Needs

Wilson is heading up a team of graduate students that is preparing sources for the new program’s website, which will serve university students and secondary school teachers. The team will create a timeline of the Jewish presence in Los Angeles, with details of migrations from one area of the city to another, and a bibliography of local archives and collections, including the UCLA Special Collections, where the papers of the Newmark family are housed.

Jeffrey Blutinger, a new member of the California State University, Long Beach history faculty who received a Ph.D. in Modern Jewish History at UCLA in 2003, is in charge of a team of undergraduate and graduate students, along with volunteers, who are collecting narrative and multimedia materials. They will be used in a major public exhibition of the program’s research findings, planned for four to five years from now at the Museum of the American West.

Blutinger’s team is culling through materials from the Seaver Center at the Los Angeles Museum of Natural History, the Shoah Foundation, the Jewish Historical Society of Southern California, and other repositories. One venue is the Sephardic Temple Tifereth Israel in Westwood, the synagogue serving Jews

that originated in Spain, North Africa, and the Middle East, who form a much smaller proportion of America's 5.2 million Jews than those of Ashkenazic descent, who trace their roots to Eastern and Central Europe.

Also part of the program is a year-long series of seminars by and for Los Angeles-area scholars that are aimed at generating debate. The series began in October with a lecture on the Jews of Boyle Heights in East Los Angeles, and will continue with seminars on pioneer Isaias Hellman, Jewish cultural work in Los Angeles, the politicization of Hollywood, including anti-Semitism, and multicultural Jewish Los Angeles.

A conference is planned for 2005 that will reach out to the public as well as the scholarly community to share what is learned in the first year, and a volume charting the new direction in research on the history of Jews in Los Angeles may result from that. In addition, the program aims to produce curricular material for grades K-12.

Leading the Way in American Jewish Studies

"As the new Dean of Humanities at UCLA, one of my goals is to help raise funds for the support and expansion of Jewish Studies at UCLA," said Gabrielle Spiegel, who became dean on July 1. "Coming to LA from the East Coast, I'm struck by the enormous variety in the Jewish community here, which includes Jews of Sephardic and Iranian as well as Ashkenazic descent. These groups are represented in addition to a large group of highly Americanized Jews, whose experience, as the center seeks to explore, differs significantly from those of their East Coast and Mid-Western brethren. One goal of Jewish Studies at UCLA is to build a program that will encompass and study this variety, to



David Myers, director of the UCLA Center for Jewish Studies

reflect the whole range of Jewish experiences in the academic programs of the University."

Said Myers, "We want to use this research and conference to construct a new and fuller narrative of Jews and Jewish life in Los Angeles and the United States at large. Our goal is to create a better understanding of the ethnic diversity within the Jewish community, and in doing so develop teaching resources that examine the sometimes forgotten interaction of Jews and other Angelenos."

Myers also hopes that the momentum from the program will lead to creation of an endowed chair in American Jewish studies at UCLA.

"The development of American Jewish studies is a top priority at the Center," he said. "By calling attention to the significance of Jewish life in the United States—during what is now the 350th anniversary of the arrival of Jews in Manhattan—the project gives momentum to our goal of becoming a major site for American Jewish studies." **CR**



This photo of Jewish children in early 20th-century Los Angeles and the other black-and-white images in this article are courtesy of Security Pacific and Herald Examiner Collections/Shades of LA Archives/Los Angeles Public Library and LA Jewish Historical Society's Photo Archive.

Robin Heffler is a Los Angeles-based freelance writer and a former editor at UCLA.

A New Bridge to Science Collaboration

The College's Science Faculty Research Colloquium, now in its third year, brings the work of the university's finest faculty to the campus and the public.

By Stuart Wolpert

When Tony Chan became dean of physical sciences in 2001, among his top priorities was finding new methods to build collaboration across the sciences.

To achieve this goal, Chan and former Life Sciences Dean Fred Eiserling created the UCLA Science Faculty Research Colloquium Series, a program that showcases presentations by renowned UCLA faculty on their current research for the campus and the public.

UCLA auditoriums filled last year, and will no doubt fill again in 2004–05, for the lecture series, which is offered free of charge.

"These lectures are vehicles to inform colleagues of current research, to promote interdepartmental research collaborations, and to create interest among non-scientists," said Chan.

Previous speakers in the series have included such distinguished UCLA scholars as Emily Carter, Elizabeth Neufeld, Owen Witte, Utpal Banerjee, Edward Wright and Eli Yablonovitch, and this year's series promises another stellar group of scientists.

"The lectures highlight the frontier research of our best faculty," said Emil Reisler, dean of life sciences.

For 2004–05, four scholars from the College will present lectures in the series. (In addition, the series includes Kang Wang from the UCLA Henry Samueli School of Engineering and Applied Science, and Edward DeRobertis from the Geffen School of Medicine.)

The College Faculty who are Research Colloquium Lecturers for 2004–05 are:

Arnold J. Berk: Insights into the Machinery of the Cell

When a gene is switched on, it begins a process called transcription. During transcription, genetic

information in a DNA molecule in a gene is copied into messenger RNA, and that messenger RNA is then read by ribosomes, the factories scattered throughout cells that manufacture proteins. The principal focus of Arnold Berk's laboratory is research on the molecular mechanisms that regulate the initiation of transcription.

"We study how genes get switched on and off, and how they are controlled when they are switched on and off," said Berk, a professor of microbiology, immunology and molecular genetics, and former director of UCLA's Molecular Biology Institute. "We study the proteins involved in transcription and how they work."

A second project in Berk's laboratory involves proteins of the adeno virus that affect many aspects of the cell during infection, and play an important role in the ability of this virus to cause tumors. The adeno virus produces tumors in rats by causing the degradation of a protein in cells called P53, which is an important substance in protecting cells from becoming cancerous. A third project focuses on gene therapy



Arnold Berk, Microbiology, Immunology, and Molecular Genetics

for treating diseases based on knowledge gained of the adeno virus. Potential targets of gene therapy are diseases such as sickle cell anemia, cystic fibrosis, and Parkinson's disease.

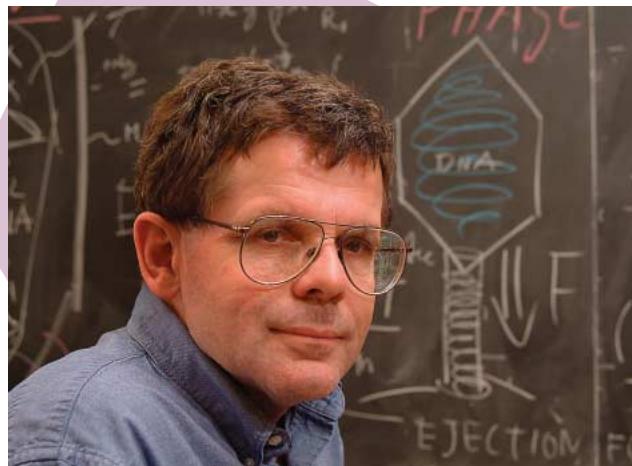
Much of the research in his laboratory focuses on the adeno virus as a model to study how the cell works; the virus is one of more than 100 that cause the common cold. "Much of our understanding about transcription control comes from studying this virus," Berk said. This research on transcription control will be the central focus of Berk's lecture in the Science Faculty Research Colloquium.

Robijn Bruinsma: A Marriage of Theoretical Physics and Molecular Biology

Robijn Bruinsma is a theoretical physicist, but one who delves into the world of molecular biology.

"Physicists now ask, can we understand how a protein works or how DNA works in the way that we understand how a steam engine works or a car engine works?" said Bruinsma. "Can we understand how the parts work together in terms of the principles of physics? Yes, in some cases we can, through a combination of theory and experiment, and as a result, it's a whole new world."

"My colleagues and I ask, for instance, how proteins can generate mechanical force. What are the maximum limits—in the same way that scientists 200



Robijn Bruinsma, Physics

years ago asked what the maximum limits were of a steam engine?"

Over the last few years, Bruinsma has been studying how viruses work, in collaboration with his colleagues Joseph Rudnick from the physics department, and William Gelbart and Charles Knobler from UCLA's department of chemistry and biochemistry. In his Science Faculty Research Colloquium, he will discuss viruses and why physics can be useful in the study of viruses.

"There's a new generation of theoretical and experimental physicists who are totally comfortable with molecular biology and who apply ideas from genetics and concepts from physics," said Bruinsma. "If we want to understand the physics of a protein, we also have to understand its evolutionary history and the family of proteins to which it belongs (the biological context, in other words); you cannot just think like a physicist; you have to be able to think in more than one way to obtain a complete picture."

Keith Holyoak: Exploring the "Analogical Mind"

"My love is like a red, red rose"—when Robert Burns wrote those immortal words in 1794, he was not, of course, claiming that his emotion was literally a flower. Burns used the comparison between love and a rose as an analogy, a cognitive mechanism for comparison that appears to be unique to the human mind.

Psychology Professor Keith Holyoak conducts research in human reasoning and problem solving. Much of his work is concerned with the role of analogy in thinking; a major theme in his work is the way in which analogy serves as a psychological mechanism for learning and transfer of knowledge.

"I've always been interested in the basic questions

Donors Make Colloquium Possible

This year's UCLA Science Faculty Research Colloquium Series has been generously supported by Shang-Li ("S.L.") and Betty Huang.

S.L. and Betty Huang are relatively new friends to UCLA, but they are already dedicated and committed participants in the UCLA family. S.L. is a member of the Asia Leadership Council and Chancellor's Associates, and also serves on both the Foundation Board of Governors and the Foundation Board of Directors.

The Huangs provided a leadership gift to initiate a dean's discretionary fund in the Division of Physical Sciences of the UCLA College, and also contributed substantially to the UCLA Fund.

of how the human mind works, and how it differs from other brains,” Holyoak said. “Reasoning with analogies is one of the principal differences between humans and other organisms.

“The study of analogies leads to an exploration of how humans create,” Holyoak said. “How do you create genuine insight? It doesn’t come from nothing, it comes from looking at what you already know in a different way. There has to be some kind of cognitive mechanism that transforms what you know already into a different kind of vision.”

Holyoak, who came to UCLA in 1986, will use his lecture as an opportunity to explore the benefits and pitfalls of analogies in human thinking.

“Next, we want to pursue the basis of analogy in the brain at a more detailed level,” Holyoak said. “The whole issue of using analogies leads to the bigger issue of how humans use knowledge; how do you take a representation of a huge concept—like the solar system—and transfer them into something more.”

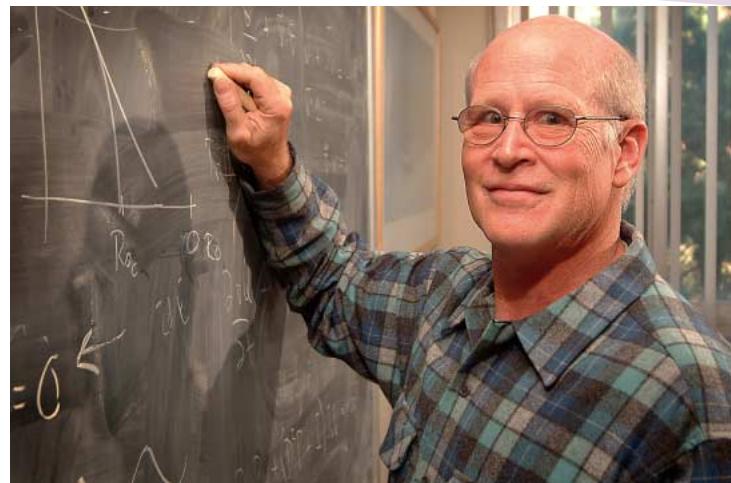
James McWilliams: Simulation Models Reveal the Threat of Global Warming

When James McWilliams discusses his research, he offers an analogy that starts with British scientist Alan Turing’s test for artificial intelligence: If you communicate over a phone line and can ask any questions you want for a certain period of time and hear the answers, when you cannot say with confidence whether you were talking to a person or a machine, then artificial intelligence has been created.

In the complex natural geophysical and astrophysical systems that McWilliams studies, when you can generate computational simulation models whose output in certain formats is indistinguishable from what is measured in nature, then you have passed the equivalent of Turing’s test.

“We cannot unambiguously meet that standard yet, and may not be able to for decades, but we are steadily approaching that point,” McWilliams said of the quest that has engaged his energies for years.

McWilliams’ research is on the fluid motions of the Earth’s oceans and atmosphere, particularly the theo-



James McWilliams, Atmospheric and Oceanic Sciences

retical understanding of fluid dynamics and the bio-geochemical consequences of winds and currents.

“A large part of nature is fluids, including the water, air, much of the Earth’s interior, and most of space,” said McWilliams, who is the Louis B. Slichter Professor of Earth Sciences in the Institute of Geophysics and Planetary Physics and the Department of Atmospheric and Oceanic Sciences.

Part of his research addresses global warming, as climate modeling is the quantitative basis for the forecast of global warming. McWilliams expects that his lecture will address global warming and other environmental disruptions, which he believes are a defining issue for modern civilization.

“Everybody ought to be interested in global warming,” McWilliams said. “The science of global warming is very difficult, both to do and to communicate, which may be a big reason why society has not responded to a threat that is quite clear to most scientists.”



Keith Holyoak, Psychology

Science Colloquium Series 2004–05

January 14	Arnold Berk (Microbiology, Immunology and Molecular Genetics)
February 18	Edward DeRobertis (Medicine)
March 18	Robijn Bruinsma (Physics and Astronomy)
April 15	Keith Holyoak (Psychology)
May 20	James McWilliams (Atmospheric and Oceanic Studies)
June 10	Kang Wang (Engineering)

All of the lectures will be held at 4 p.m. in 159 Boyer Hall.

The Science Colloquium Series is free, but early arrival is recommended. For information about times and locations, visit www.college.ucla.edu/colloq.htm

The War on Terror: An Uphill Battle for Global Support

*Is a global coalition
against terrorism possible?*

By Geoffrey Garrett

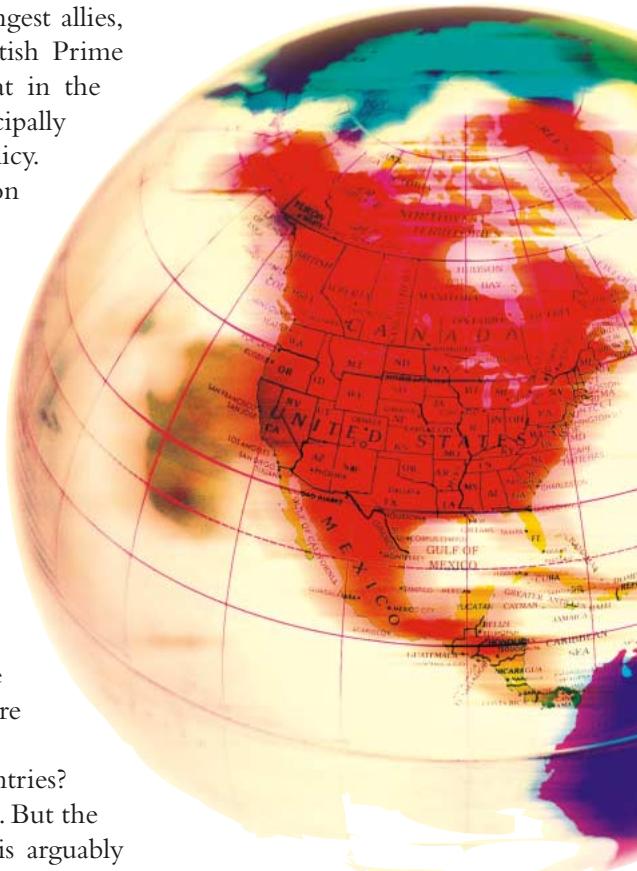
During the presidential campaign, John Kerry and George Bush worked hard to highlight their differences to win favor with voters—especially when it came to the issue of Iraq. But they agreed completely about the critical role that the battle against terrorism plays in the future of the United States and the world.

And yet the war on terrorism is a much less prominent part of the political landscape outside the United States. Just look at two of America's strongest allies, and how they positioned their first elections since the Iraq war. British Prime Minister Tony Blair insisted at his party's conference in October that in the elections expected next spring, his government should be judged principally on its domestic "opportunity society" agenda, and not on its Iraq policy. Australian Prime Minister John Howard called an election, held on October 9—earlier than originally planned—to insure against ripple effects from a possible defeat of President Bush on November 2. Though the temptation in the U.S. has been to judge Howard's re-election as an affirmation of the war on terrorism, the election campaign was waged almost exclusively on domestic issues.

Although the international coalition in Iraq includes 30 countries, only 20,000 of the 160,000 foreign troops stationed there are from countries other than the U.S. In the face of widespread popular opposition, the major partners stay in the coalition because their leaders consider doing so either a moral imperative (as Tony Blair does) or appropriate recompense for America's support of their countries (notably Poland and South Korea, with Poland announcing its troop withdrawal for late 2005). According to a recent survey by the German Marshall Fund, more than twice as many Europeans believe that the European Union should become more independent from—not more closely linked to—the U.S. in foreign affairs.

What explains the disjuncture between the U.S. and other countries? Certainly, dissatisfaction with the war in Iraq has played a significant role. But the broader context of global terrorism and America's role in the world is arguably more important.

The most tangible and shocking impact of terrorism—the number of resulting fatalities in the U.S. and other countries—tells a large part of the story. According to State Department-gathered statistics, 6,943 people worldwide died as a result of international terrorist attacks from 1996 through 2003 (thus not including the Madrid bombings and the Beslan siege in 2004). Of these fatalities, 3,189 people—46% of the world's total—died in the United States on Sept 11. The next highest number of terrorist fatalities among the remaining rich democracies during this period was 414 in Israel. The State Department reports 11 fatal terrorist victims in Britain, France and Germany combined.





Put differently, 12 people died on September 11, 2001 for every million people living in the U.S. The figure for Israel, sadly but not surprisingly, was even higher—69 people per million of its population died from terrorist acts between 1996 and 2003. But the comparable ratio for Britain, France and Germany is about one-twentieth of a terrorist fatality per million.

Outside of the western world, there were about 3,000 deaths from international terrorism during the same period, with the most fatalities in India followed by Kenya. Of course, in these and other countries, terrorism is often merely one element in civil wars that constitute the fundamental threat to security in the developing world. According to the International Rescue Committee, more than 3 million people have died since 1998 as a result of the civil war in Congo (formerly Zaire) alone.

George Bush, John Kerry, the 9/11 Commission as well as most Americans would say that these statistics understate the global terrorist threat. In the United States, the September 11 attacks are viewed as harbingers of things to come, the tip of a very large iceberg of Islamic extremism bent on attacking the American way of life as well as freedom and modernity all around the world.

September 11 indeed changed everything, in the United States at least. Americans' sense of physical invulnerability was shattered. From the White House to Main Street,

Americans believe that their way of life and all it stands for are under attack, and that there is no other course than to take the fight for freedom to the enemy. Shifting justifications for the war on Iraq and restrictions on civil liberties at home are widely tolerated, although grudgingly, because they can be subsumed as part of the broader war.

But many people outside of the U.S. believe that when the terrorists condemn western excesses, it is the United States that they think about first and foremost. American global hegemony, not only in terms of military power but also in politics, economics and culture,

is a fact of contemporary life—the Americanization of the world.

There are good reasons to think this way. The recent Madrid bombings and the Beslan school siege were among the deadliest attacks in history, suggesting that September 11 may well have been a turning point in the scale and scope of terrorism. And who knows how many more large-scale attacks have been thwarted by the heightened vigilance of the U.S. and other countries since September 11?

In addition to these differences in the magnitude of international terrorism, the identity of the perpetrators—and hence the perceived nature of the threat—also differs between the United States and much of the rest of the world. For Americans, as well as for Israelis, the war on terrorism is a war against Islamic extremists. But in the rest of the world, only about half of the deaths from international terrorism since 1996 have been attributed by

the State Department to Islamic militants.

It should not be surprising if other countries are reticent to join what they view as principally America's war. The Spanish response to the Madrid bombings is particularly telling. Knowing how unpopular his support for the Iraq war was, Spain's Prime Minister Aznar initially claimed that the bombers were from ETA, the Basque separatist group. When it became clear that Al-Qaeda was the far more likely suspect, the Spanish people threw out Mr. Aznar in favor of a new government that promptly got their troops out of Iraq. The reasoning was simple: Spain has enough problems of its own; why increase the risk of terrorist attacks by fighting in America's war?

Taking all the evidence into account, there is no reason to believe that the United States will have an easy time building a broader-based and more deeply committed global coalition supporting the war on terrorism. The September 11 attack on the United States generated global sympathy. But the enduring impact of 9/11—materially and psychologically—continues to be concentrated in the United States. Translating global sympathy into an effective global coalition, first and foremost in Iraq, will remain an uphill battle. ☈

Garrett is dean and vice provost of the UCLA International Institute, and director of the Ronald W. Burkle Center for International Relations at UCLA.

"Taking all the evidence into account, there is no reason to believe that the United States will have an easy time building a broader-based and more deeply committed global coalition supporting the war on terrorism."

Linking Community and Classroom

By Robin Heffler

When Judith Ramirez arrived at MacClay Middle School in Pacoima last year, she was anxious about being able to work with the 12- and 13-year-olds she would be tutoring and mentoring.

Ramirez had enrolled in "Barrio Service Learning," a UCLA course offered in Chicana/o studies. In addition to classroom study of theories and issues related to Chicano immigrant communities, as a course requirement Ramirez chose to work with "Communities in Schools," one of nine nonprofit organizations that are linked to the course through the Center for Community Learning. The center, housed in the College's Division of Honors and Undergraduate Programs, works with academic departments to create opportunities for undergraduates to provide direct service or conduct research in Los Angeles.

Then a UCLA junior, Ramirez had tutored before, but not as part of an academic course. She was assigned to boys toughened by living in public housing projects and being surrounded by gang activity.

But for Ramirez and fellow UCLA student Veronica Valdez, their participation in a service learning course turned out to be one of the most rewarding experiences of their young lives.

"We worked with them mainly in math and science, which they were initially failing," said Ramirez, who is a double major in Chicana/o studies and sociology and plans to pursue a master's degree in education. "But we wouldn't give up on them, even if they were acting out, and by the end of the quarter they were showing us their As and Bs."

Ramirez was among 3,000 UCLA students who last year enrolled in UCLA courses that are linked to more than 250 Los Angeles community organizations and businesses by the new Center for Community Learning.

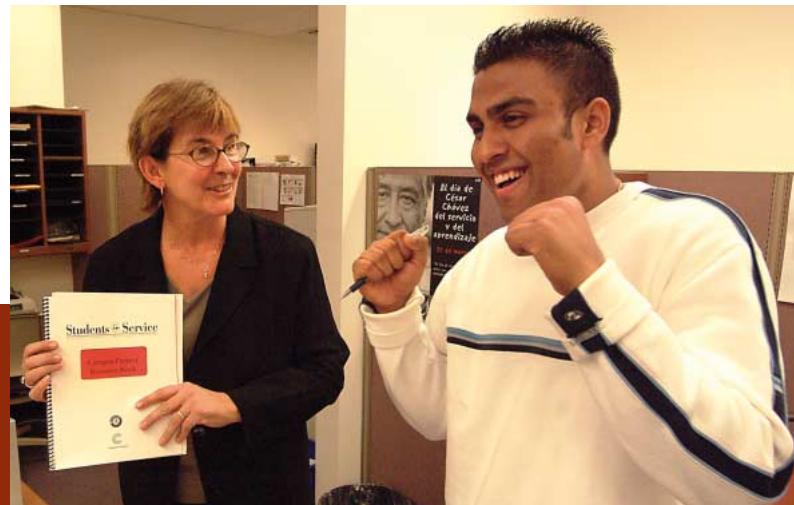
Reorganized as an academic unit in 2003, the center works to expand the number of academic

The Center for Community Learning in Honors and Undergraduate Programs is building on the university's commitments to Los Angeles by ensuring that research and service by students in community organizations play an integral role in the undergraduate experience.

courses and internships that provide innovative and challenging opportunities for undergraduates to participate in community-based projects. Currently, more than 100 faculty are involved in developing a growing number of courses that include academic experiences in the community that are coordinated by the center.

Outreach to faculty who either have not yet taught service learning courses or have not done so recently is a high priority, and many faculty also come to the center to learn more about how to use service learning in their teaching. Faculty receive assistance and consultation to adjust the curriculum so that students' reading, writing, and class discussions are linked to their experiences in the community.

Much of the center's growth is due to the leadership of Kathy O'Byrne, who became director in 2001. O'Byrne works closely with Frank Gilliam, associate vice chancellor and professor of political science, to create structured academic and research programs that support the goals of Chancellor Albert Carnesale's "UCLA in LA Initiative."



Kathy O'Byrne, director of the Center for Community Learning, with undergraduate Santosh Desai, who has just learned he has been accepted to the "Students in Service" AmeriCorps Program.



UCLA students immerse themselves in role playing for training in a gang intervention program offered through the Center for Community Learning.

The center's efforts evolve out of a campuswide commitment at UCLA to build an even stronger role for service learning—UCLA courses that include service or research in the community—as part of the core undergraduate experience.

For her exemplary leadership, O'Byrne received the 2004 Richard E. Cone Award for excellence in cultivating community partnerships in higher education from the California Campus Compact.

"Our center supports undergraduate students, the faculty who teach them, and our community partners," said O'Byrne, who spent eight years directing service learning and freshman programs as a faculty member at California State University, Fullerton. "We're working to bring together a range of teaching and research options that support the undergraduate experience at UCLA, including internships, service learning courses, community-based research, and AmeriCorps programs."

The newest program offered by the center is JusticeCorps, a service scholarship program funded through AmeriCorps. Recently, 51 UCLA students were among 100 Los Angeles-area college students to be sworn into the program, which assists self-help legal clinics in answering basic questions for those who cannot afford an attorney. This includes translating legal forms, and helping litigants who represent themselves to navigate the complex paperwork of the court system.

One of the center's "crown jewels," said O'Byrne, is the service learning component that is linked to the year-long course, "Frontiers of Human Aging," in UCLA's Freshman Cluster Program. Now in its fourth year, it engages more students than any other service learning course, with 124 students scheduled to participate in Winter Quarter 2005. Students enrolled in the course not only study theories of aging but also work with older adults at senior centers, Alzheimer's

programs, or other facilities for the aging.

Professor of Social Welfare JoAnn Damron-Rodriguez, who teaches the course, sees service learning as an opportunity to educate students about the realities of senior life and programs. "Freshmen come in with ageism well established," she said. "After interacting with seniors they come back saying they didn't realize how much they would enjoy talking to older people, that they're funny, experienced, and caring about the students' education. The students also get to see the challenges of budget cuts or other limitations in programming because of funding."

Through leadership within the Los Angeles Higher Education Partnership, the California Campus Compact, and the Corporation for National and Community Service, the center is actively engaged in defining undergraduate civic engagement at the local, state, and national levels. UCLA representatives regularly disseminate information to faculty and students at peer institutions, thus setting the pace for this national movement in higher education.

"Our goal is to ensure that academic work linked to research and service in the community is a cornerstone of undergraduate education at UCLA," said Judith L. Smith, dean of honors and undergraduate programs, and vice provost for undergraduate education. "We want every UCLA undergraduate to have the opportunity to enroll in courses that include meaningful work in the communities of Los Angeles—whether that work is direct service or research." 

"We want every UCLA undergraduate to have the opportunity to enroll in courses that include meaningful work in the communities of Los Angeles—whether that work is direct service or research."

Warsaw Fellowships: Creating a New Generation of Scientists

By Dan Gordon

A fellowship program created by Ernest and Elaine Warsaw is a “great opportunity” for graduate students—and the donors as well.

It's a long way from Moscow to Westwood, but it's been well worth the journey for Katya Panina, and for the cause of science at UCLA.

The daughter of a biologist mother and physicist father, Panina grew up in Russia and attended Moscow State University to study mathematics and computer science. While there, she read James D. Watson's *The Double Helix: A Personal Account of the Discovery of the Structure of DNA* and was hooked on the process of scientific discovery in biology.

After completing her Master's degree, Panina applied to the Ph.D. program in UCLA's Department of Microbiology, Immunology and Molecular Genetics (MIMG). “The biological sciences are not very well funded in Russia,” she notes. “For what I wanted to do, UCLA was the place to be.”

And the place to find support.

The Ernest and Elaine Warsaw Fellowship program, an endowed scholarship fund that supports the work of top MIMG graduate students, helps to relieve the financial burden.

Panina and Brian Zarnegar, this year's Warsaw Fellows, follow in the footsteps of 32 others who have had their work funded since Ernest and Elaine Warsaw established the program in 1988. The growing community of successful scientists whose careers were launched with assistance from the prestigious fellowship convenes at UCLA each year for a luncheon, where they update the Warsaws, MIMG faculty and each other on their scientific progress and celebrate the accomplishments of the new fellowship recipients.

“The support provided the Warsaws' endowment is an ideal example of how philanthropy can have high impact on graduate studies in an academic field,” said Emil Reisler, dean of life sciences. “The Warsaw Fellowships are helping to create a new generation of highly talented scientists—the future leaders of their fields.”

Based on their Ph.D. work, this year's Warsaw Fellows appear headed down the successful path of their predecessors.

Working out of the laboratory of Genhong Cheng, associate professor of MIMG, Zarnegar studies B-cells, the activation of which results in the generation of antibody-producing plasma cells and memory B-cells. His recent insights could one day have important clinical implications: CD40—a molecule found on the surface of B-cells—is critical to immune responses, but has also been implicated in diseases of inflammation—from arthritis and atherosclerosis to Alzheimer's.

“By studying the intracellular signaling mechanisms of the CD40 receptor, we hope to identify which pathways are absolutely required for immune responses, and which ones might be less important but more involved in the negative aspects of CD40, such as inflammation, in certain types of cells,” said Zarnegar, who is on schedule to complete

his Ph.D. work in June, with plans to pursue his research on the human immune system in an academic postdoctoral fellowship.

"The ultimate goal," said Zarnegar, "is to design targets that are more specific and downstream of CD40 so that we can leave the immune response alone while targeting, for example, arthritic or atherosclerotic lesions."

Panina, working in the lab of Jeffrey F. Miller, professor and chair of MIMG, capitalized on her background in computer science to establish a genomic screen using unique features of *Bordetella*—the bacteria that is a culprit in whooping cough—to identify the first type III secreted toxin in *Bordetella* that is capable of killing human cells. Now she and others in Miller's lab are attempting to characterize the toxin and learn how it interferes with the proteins inside human cells to cause the disease.

Mindful of the benefit of multidisciplinary expertise to her own work, Panina has her sights set on an academic career, and hopes to head a lab that brings together researchers from many scientific disciplines.

The contribution of graduate students at a leading research university such as UCLA cannot be overstated, Miller said.

"These students are responsible for a tremendous amount of important research," he said. "Our ability to attract the best faculty, to secure research funding, and to produce publications that result from our work are driven to a significant extent by their efforts. We need to be proactive in supporting them."

Ernest Warsaw had been thinking about the importance of attracting faculty and supporting graduate students at his alma mater more than two decades ago. A graduate from UCLA in English who went on to a successful business career, he first approached the campus

with the idea that he and his wife would contribute to the annual housing costs of a professor, helping UCLA to overcome a potential barrier to faculty recruitment: Los Angeles' pricey real estate market.

Warsaw's donation was used to attract a talented

young faculty member in the field of microbiology, Owen Witte. Through that relationship, Warsaw got to know other faculty in the department. "I found kindred souls," he said. "And when they said they could really use support for graduate scholarships through an endowment, I thought that was a great idea, a way to make a big impact."

A Warsaw Fellowship is considered the most prestigious distinction awarded to Ph.D. students in MIMG, Miller said, so competition is intense. Two recipients are selected each year by a five-member Graduate Committee, which reviews undergraduate and graduate transcripts, three letters of recommendation, GRE scores, abstracts or manuscripts, and a



Brian Zarnegar, a Warsaw Fellow for 2004–05

"The contribution of graduate students at a leading research university such as UCLA cannot be overstated."

statement of personal progress in research.

The funding that comes with the award helps both the recipients and the faculty members whose labs they support. Fellows are also frequent authors of research in major scientific journals.

"There are a lot of labs where it's difficult for the principal investigators to fund their students while also using their grant money to fund experiments," said Zarnegar. "In those cases, students often end up doing extracurricular tutoring and working as teaching assistants to make money so that it doesn't come from the grant. And when a student has to do that, there's not a

lot of time left to do research.”

When Ph.D. students have time to support their principal investigator’s research program and don’t need to take funds out of that person’s grant, it significantly increases the productivity of the lab as a whole.

“You’re freeing up money, in essence, to push the project forward,” said David Brooks, a 1998–99 Warsaw Fellow in the laboratory of Dr. Jerome Zack, professor and MIMG vice chair.

While a member of Zack’s lab, Brooks was the lead author on a paper in which the scientists described a technique they developed to switch on and drive hibernating HIV from its hiding places in the body. The research suggests a therapeutic strategy to kill the hidden virus so people who are HIV-positive could eventually stop taking antiretroviral medications. Brooks is now a postdoctoral fellow at The Scripps Research Institute, studying how HIV and other persistent infections perturb the immune response.

The earliest of the Warsaw Fellows are still connected to the program. Ernest and Elaine Warsaw still remember the luncheon more than 16 years ago to honor the first two fellowship recipients. He recalls being approached that day by a grateful Warsaw Fellow, Peggy Cotter, who was carrying one of her two small children. That child is now in college, and Peggy Cotter has parlayed her Warsaw Fellowship into a successful career as an assistant professor in the Department of Molecular, Cellular and Developmental Biology at UC Santa Barbara.

“It’s a great feeling when you’re able to see that you’ve had something to do with helping someone in that way,” Warsaw said.

After graduating from UCLA with her B.A. in 1980, Cotter had spent nearly six years working as a medical technologist, during which she had two children. Returning to graduate school with a 3- and a 5-year-old, she recalls, “I felt like I had been out of school so long that I wasn’t sure I was going to be able to keep up with the other

“Maybe one day, a Warsaw Fellow will make a discovery that helps to wipe out an important disease, like AIDS. Knowing that we are playing a small part in assisting these young people who go on to play prominent roles in making people’s lives better is enormously satisfying.”



Katya Panina, a Warsaw Fellow for 2004-05, with Ernie Warsaw.

students.” When she learned she was to be one of the first two Warsaw Fellowship recipients, “it was a huge confidence booster.”

It also enabled Cotter, who had devoted roughly 20 hours a week to her job as a teaching assistant the previous year, to devote that time to her research on gene regulation in the bacteria *Escherichia coli*. As a result, she published seven papers in journals during her graduate career, an impressive record that led to a postdoctoral fellowship in Miller’s lab. At UCSB, Cotter is exploring how *Bordetella* causes respiratory tract infection at the molecular level.

The Warsaw Fellows, past and present, also use the luncheons as an opportunity to get to know one another better, exchanging accounts of the science they’re pursuing and offering moral support.

“It’s exciting to read the papers that past Warsaw Fellows have published and see the great impact they’ve made on science—and then to get to meet them,” said Panina. “I feel like I’m following a great tradition.”

“When you have a chance to help others find solutions to the great problems we have, it’s a great opportunity,” said Ernest Warsaw. “Maybe one day, a Warsaw Fellow will make a discovery that helps to wipe out an important disease, like AIDS. Knowing that we are playing a small part in assisting these young people who go on to play prominent roles in making people’s lives better is enormously satisfying.” CR

Dan Gordon is a Los Angeles-based freelance writer who contributes frequently to UCLA publications.

Discovery Showcase

Surveying the spectrum of scholarship by faculty in the College

James Lake

Molecular, Cell and Developmental Biology

Should the “Tree of Life” Be Uprooted?

The “Tree of Life,” the long-popular method to describe organization of animals, may be better described by a ring—a finding with implications for animals at all levels of evolution.

One of science’s most popular metaphors—the “tree of life,” with its evolutionary branches and roots, showing groups of bacteria on the bottom and multicellular animals on the higher branches—turns out to be a misnomer, UCLA molecular biologists reported in the journal *Nature*.

“It’s not a tree; it’s actually a *ring* of life,” said James A. Lake, UCLA professor of molecular biology. “A ring explains the data far better.”

The ring of life has significant implications for eukaryotes (cells with nuclei), the group that includes all multicellular forms of life, such as humans, other animals and plants.

“Through the use of genomics, we show that the fusion of two prokaryotes—a life form that does not have a cellular nucleus—created the first eukaryote,” Lake said. “There have been theories, but we have never known

where eukaryotes came from before. Eukaryotes inherited two sets of genomes from very different prokaryotes.”

One prokaryote ancestor branches from deep within an ancient photosynthetic group of microscopic single-celled bacteria called the proteobacteria. The group is primarily photosynthetic, but today also includes non-photosynthetic *E. coli* and human pathogens. The other group is related to prokaryotes, some members of which today can live at temperatures hot enough to boil

water (160–230 degrees Fahrenheit) and can be found in hot sulfur springs and geothermal ocean vents worldwide.

“At least two billion years ago, ancestors of these two diverse prokaryotic groups fused their genomes to form the first eukaryote, and in the process, two different branches of the tree of life were fused to form the ring of life,” Lake said. “A major unsolved question in biology has been where eukaryotes came from, where we came from. For us, the answer is that we have two parents,

and we know who those parents were.

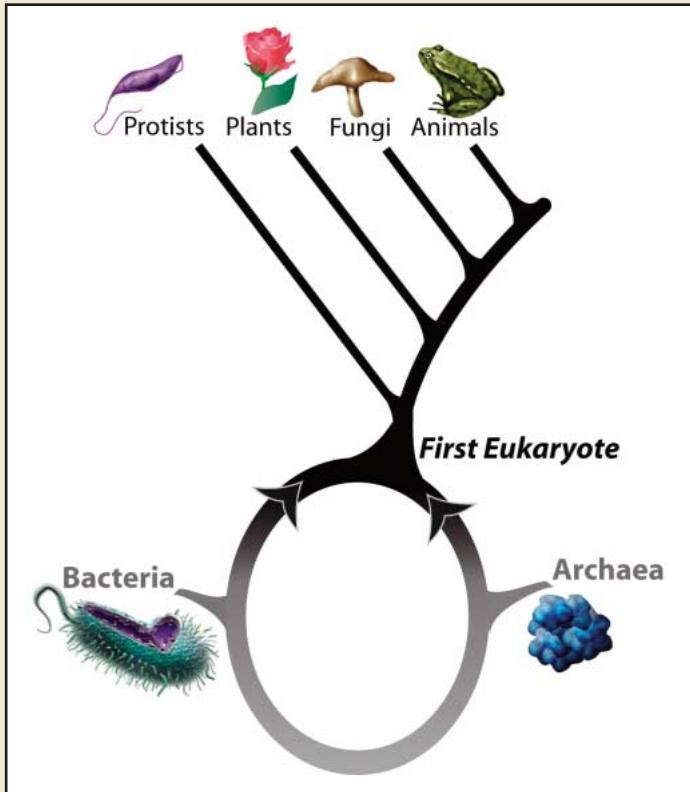
“But if we go back a hundred billion generations, our ancestor was not a human, and wasn’t even a primate,” Lake added. “But we are distantly related to ancient and proteobacterial ancestors, just as we are related to our parents and grandparents.”

The research, based on an analysis of more than 30 genomes, was federally funded by the National Science Foundation, the Department of Energy, the National Institutes of Health and NASA’s Astrobiology Institute.

Lake conducted the research with Maria C. Rivera, a research scientist in UCLA’s department of molecular, cell, and developmental biology, and UCLA’s astrobiology program. They made new algorithms, conducted a detailed mathematical analysis and studied the evolution of genomes.

“We followed the genes that make up organisms through time, and saw the fusion of organisms,” Lake said. “As we learn more about the organisms that came together, we will learn more about their genetic background. The ring will lead to a better understanding of eukaryotes.”

www.mcdb.ucla.edu



The “Ring of Life”—a revolutionary step in describing evolution of animals, developed by Molecular Biologist James Lake and Research Scientist Maria C. Rivera.

Eric Jager English

A Fatal Medieval Triangle

Research on 14th-century France produces the dramatic, violent story of “the duel to end all duels.”

In 1386, a few days after Christmas, a huge crowd gathered at a Paris monastery to watch two men fight a duel to the death—a clash meant to “prove” which man’s cause was right in God’s sight. The dramatic true story of the knight, the squire, and the lady unfolded during the devastating Hundred Years War between France and England, as enemy troops pillaged the land, madness haunted the French court, and the Great Schism split the Church.

The story of three larger-than-life characters caught up in a fatal triangle is recounted in *The Last Duel: A True Story of Crime, Scandal, and Trial by Combat in Medieval France* (Broadway Books), written by Eric Jager, professor of English. Jager—whose research and teaching focuses on, among other fields, Old English, Middle English, and classical culture—produced an account of medieval France that brings to light the true story of the final “duel to end all duels”: a trial by combat that pitted a knight against a squire accused of violating the knight’s beautiful young wife.

Jager’s extensive research in Normandy and Paris—work that included exploration of family records of archives so comprehensive that they date back to the Middle Ages—turned up unpublished documents that shed new light on the case and the

For Jager, conducting research on a period of rebellion, treachery, and plague “was like trying to solve a true-life crime mystery and write a detective story.”

tangle of mysteries and motives at its core. For Jager, conducting research on a period of rebellion, treachery, and plague “was like trying to solve a true-life crime mystery and write a detective story.”

“I first got the idea for the book ten years ago while reading a medieval chronicle by Jean Froissart. Froissart was the Dominick Dunne of the 14th Century, and the story of the knight, the squire, and the lady was the high-profile celebrity scandal of the day.”

At the heart of Jager’s book is Jean de Carrouges, a Norman knight who returned from Paris to find his wife, Marguerite, accusing Jacques Le Gris, her husband’s old friend and fellow courtier, of brutally raping her. The knight took his cause before the teenage King Charles VI, the highest judge in France.

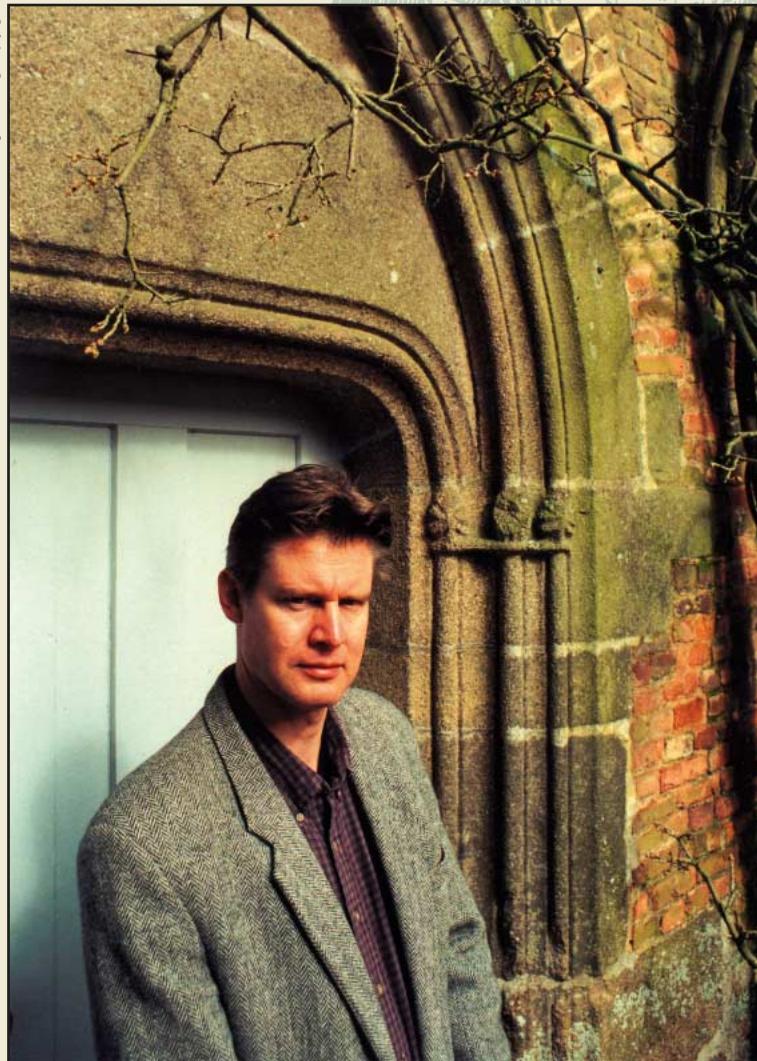
Amid Le Gris’ vociferous claims of innocence and doubts about the now-pregnant Marguerite’s charges (and about the paternity of her child), the deadlocked court decreed a “trial by combat.” The decision also left Marguerite’s fate in the balance, for if her husband and champion lost the duel, she would be put to death as a false accuser.

De Carrouges and Le Gris, in full armor, eventually met on a walled field in Paris before a massive crowd that included the king and many nobles of the realm. A fierce fight on horseback and then on foot ensued during which both combatants suffer wounds—but only one received fatal blows.

“The violent and tragic episode was notorious in its own time,” Jager said. “Because of the nature of the alleged crime and the legal impasse it provoked, trial by combat, an ancient but increasingly suspect institution, was thereafter abolished.”

www.thelastduel.com
www.english.ucla.edu/faculty/ejager

photo: Peg Eby-Jager



Eric Jager

Lee Ohanian and Harold Cole
Economics

Was FDR Responsible for Prolonging the Great Depression?

A new economic analysis shows that America's worst economic downturn may have dragged on because of the unexpected results of a recovery package put forth by Franklin Roosevelt.

Two UCLA economists say they have determined why the Great Depression dragged on for almost 15 years, and they blame a suspect previously thought to be beyond reproach: President Franklin D. Roosevelt.

After scrutinizing Roosevelt's record for four years, Harold Cole and Lee Ohanian conclude in a new study that New Deal policies signed into law 71 years ago thwarted economic recovery for seven long years.

"Why the Great Depression lasted so long has always been a great mystery, and because we never really knew the reason, we have always worried whether we would have another 10- to 15-year economic slump," said Ohanian, a professor of economics and vice chair of UCLA's Department of Economics. "We found that a relapse isn't likely unless lawmakers gum up a recovery with ill-conceived stimulus policies."

In an article in the *Journal of Political Economy*, Ohanian and Cole blame specific anti-competition and pro-labor measures that Roosevelt promoted in the National Industrial Recovery Act (NIRA), which was signed into law June 16, 1933.

"President Roosevelt believed that excessive competition was responsible for the Depression by reducing prices and wages, and by extension reducing employment and demand for goods and services," said Cole, also a UCLA professor of economics. "So he came up with a recovery package that would be unimaginable today, allowing businesses in every industry to collude without the threat of antitrust prosecution and workers to demand salaries about 25 percent above

where they ought to have been, given market forces. The economy was poised for a beautiful recovery, but that recovery was stalled by these misguided policies."

Cole and Ohanian found that in the three years following the implementation of Roosevelt's policies, wages in 11 key industries averaged 25 percent higher than they otherwise would have done, the economists calculate. But unemployment was also 25 percent higher than it should have been, given gains in productivity.

Meanwhile, prices across 19 industries averaged 23 percent above where they should have been, given the state of the economy. With goods and services that much harder for consumers to afford, demand stalled and the gross national product floundered at 27 percent below where it otherwise might have been.

"High wages and high prices in an economic slump run contrary to everything we know about market forces in economic downturns," Ohanian said. "By artificially inflating both, the New Deal policies short-circuited the market's self-correcting forces."

Cole and Ohanian calculate that NIRA and its aftermath account for 60 percent of the weak recovery. Without the policies, they contend that the Depression would have ended in 1936 instead of the year when they believe the slump actually ended: 1943.

NIRA's role in prolonging the Depression has not been more closely scrutinized until now because the Supreme Court declared the act unconstitutional within two years of its passage.

Even after being deemed unconstitutional, Roosevelt's anti-competition policies persisted—albeit under a different guise, the scholars found. Ohanian and Cole painstakingly documented the extent to which the Roosevelt administration looked the other way as industries once protected by NIRA continued to engage in price-fixing practices for four more years.

NIRA's labor provisions, meanwhile, were strengthened in the National Labor

Relations Act, signed into law in 1935. As union membership doubled, so did labor's bargaining power, rising from 14 million strike days in 1936 to about 28 million in 1937. By 1939, wages in protected industries remained as much as one-third above where they should have been, based on 1929 figures, Cole and Ohanian calculate.

And unemployment persisted; by 1939 the U.S. unemployment rate was 17.2 percent, down somewhat from its 1933 peak of 24.9 percent but still remarkably high.

Recovery came only after the Department of Justice dramatically stepped up enforcement of antitrust cases nearly four-fold and organized labor suffered a string of setbacks, the economists found.

"The fact that the Depression dragged on for years convinced generations of economists and policy-makers that capitalism could not be trusted to recover from depressions and that significant government intervention was required to achieve good outcomes," Cole said. "Ironically, our work shows that the recovery would have been very rapid had the government not intervened."

www.econweb.sscnet.ucla.edu



Patricia Greenfield Psychology

A Story of Mothers and Daughters

A new book by a UCLA psychologist shows how culture and social life among Maya women is affected by learning to weave.

For centuries, the Zinacantec Maya women of Chiapas, Mexico, have woven and embroidered clothing that expresses their values and embodies their role as mothers and daughters. Over 35 years, UCLA Psychology Professor Patricia Marks Greenfield has participated in this community, studying two generations of women and their daughters, often accompanied by her own daughter, Lauren, a prominent professional photographer.



A Zinacantec Maya woman at work.

Patricia's insights and Lauren's striking photos are published in *Weaving Generations Together: Evolving Creativity in the Maya of Chiapas* (SAR Press).

Greenfield addresses wide-ranging issues including how children are socialized, the effects of globalization, how economic change and growing entrepreneurship affected weaving and the teaching of weaving, creativity in the weaving process, and verbal and nonverbal communication during the process of learning to weave.

"This book is the story of a normally inaccessible culture in transition," Greenfield said. "I experienced the transitions up close through knowing, watching and studying several generations.

"My daughter was with me from the time she was three years old and then came back in her 20s to photograph the community," Greenfield said. "We have observed firsthand and documented gradual, yet dramatic social changes, which are relevant to our own society, where original cultures mix with mainstream cultures and change over time."

"How has the weaving tradition been maintained over the centuries?" Greenfield asked. "The answer lies in the ways in which weaving is taught and transformed from one generation to the next, and it revolves around child socialization and child development."

For Zinacantecs, weaving and embroidery are statements of identity and standards of beauty, Greenfield writes.

Greenfield first went to Chiapas with Lauren in 1969 and 1970. She returned after 21 years with Lauren in 1991, in order to study the next generation after a period of rapid economic change from subsistence and agriculture to money and commerce. After that, she made seven additional trips in 11 years.

In 2004, Lauren returned with her mother again, this time with her own child, now the same age Lauren had been in 1970.

"Studying two generations of girls learning to weave across two decades revealed transformations in the cultural themes of respect for tradition, family interdependence," Greenfield said. "With the change to an entrepreneurial economy came reduced respect for tradition and increased interest in innovation."

Greenfield noted, however, that those who lived there did not see change as a threat to Zinacantec culture and society. "There could be change so long as there was always a distinctive Zinacantec way," a member of the community told Greenfield.

"We observed firsthand and documented gradual, yet dramatic social changes, which are relevant to our own society, where original cultures mix with mainstream cultures and change over time."

Greenfield's research was supported by the Spencer Foundation, the National Geographic Society, the Wenner-Gren Foundation for Anthropological Research, UCLA, Radcliffe College and Harvard University.

Greenfield, who is also director of UCLA's Children's Digital Media Center, writes about the Zinacantec Maya women of Chiapas with warmth and passion, and notes that "as a mother, I made a lot more sense to the Zinacantecs than I did as a researcher.

"This is also a story of mothers and daughters studying mothers and daughters," she added. "The photographs have become part and parcel of my research. The photographs also show a personal connection that, in a closed community, was only possible because I had known families over decades and the photographer had been there as a child."

For more information about the book, visit www.weaving-generations.com.

www.psych.ucla.edu



Patricia Greenfield (right) with children in Chiapas, Mexico.

Succeeding with a Single Spin

Creating control of a single electron puts nanotechnology a step closer to breakthroughs in a broad range of applications.

Quantum computing, which holds the promise of nearly unlimited processing power and secure communications, is a significant step closer to becoming a reality with research published by a team of UCLA scientists.

The UCLA scientists succeeded in flipping a single electron spin upside down in an ordinary commercial transistor chip, and detected that the current changes when the electron flips. Their report of controlling and detecting a single electron's spin was published in the journal *Nature*.

Scientists had manipulated millions of electron spins in a transistor before, but never a single electron.

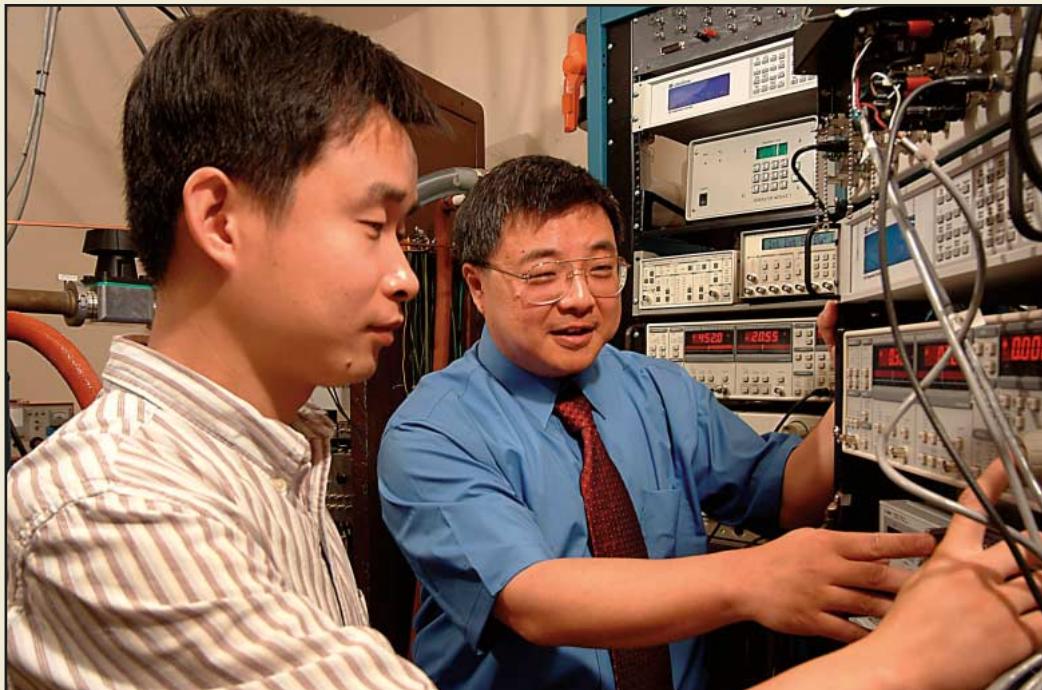
"We have gone from millions to just one," said HongWen Jiang, a UCLA professor of physics and member of the California NanoSystems Institute, in whose laboratory the experiments were conducted.

"Our research demonstrates that an ordinary transistor, the kind used in a desktop PC or cell phone, can be adapted for practical quantum computing," Jiang said. "The research makes quantum computing closer and more practical."

A single electron spin represents a quantum bit, the fundamental building block of a quantum computer.

Many scientists believe that an exotic new technology would be required for quantum computing. However, Jiang said, "I would not be surprised one day to see a quantum computer built, based almost entirely on silicon technology."

"We have measured a single electron spin in an ordinary transistor; this means that conventional silicon technology is adaptable enough, and powerful enough, to accommodate the future electronic requirements of new technologies like quantum computing, which will depend on spin," said Eli Yablonovitch, UCLA professor of electrical engineering, direc-



Physics Professor HongWen Jiang (right) with graduate student Ming Xiao.

tor of UCLA's Center for Nanoscience Innovation for Defense, member of the California NanoSystems Institute and co-author of the study. "We've done this with a commercial silicon integrated circuit chip, literally off a shelf."

How powerful can quantum computing be?

"With 100 transistors, each containing one of these electrons, you could have the implicit information storage that corresponds to all of the hard disks made in the world this year, multiplied by the number of years the universe has been around," Yablonovitch said. "And why stop with 100 transistors?"

"We've manipulated one spin," Yablonovitch said. "A year from now, manipulating a single spin might be all in a day's work, and in 10 years, perhaps it will have a commercial role."

If manipulating a single electron's spin will soon seem routine, until now it has been anything but. Jiang and his UCLA graduate student Ming Xiao worked day and night to achieve this goal, and thought about quitting more than once.

"There were so many unknowns," Jiang said, "but our initial theoretical calculations were very favorable, and gave us

confidence to persevere."

Jiang and Xiao succeeded in working with the transistor at low temperatures: minus more than 400 degrees Fahrenheit. Jiang and Yablonovitch have ideas for operating in the future at room temperature, which would be much more practical commercially.

Jiang and Xiao's method for controlling the electron was to shine a microwave radio frequency to flip the spin of the electron. The experiments last but a fraction of a second, but required years of work to reach this point.

Electrons rotate like spinning tops. The UCLA team can target a single electron and control when it is right side up and when it is upside down by changing the microwave frequency.

A next step is to demonstrate the "entanglement" of two spins, where the orientation of one electron determines the orientation of the other—a puzzle identified by Albert Einstein.

The research, a combination of physics and engineering, was funded by the United States Defense Advanced Research Projects Agency, the United States Defense MicroElectronics Activity and the Center for Nanoscience Innovation for Defense.

Great Futures for the College

Ensuring Excellence for Indo-European Studies

Why would a professor emeritus of anthropology from the University of Arizona, who earned a Ph.D. from Yale and also taught at Harvard and Stanford, become a devoted supporter of UCLA? The answer is simple: Indo-European studies.

A. Richard Diebold, Jr., has been a friend to UCLA's Indo-European studies program for more than a decade, contributing substantial, wide-ranging support for faculty and students, library acquisitions, and other needs. His own specialties, linguistic anthropology and philology, are important elements in Indo-European studies, an interdisciplinary field that examines the history and prehistory of the languages and cultures that are spread from India, Central Asia, and the Near East to Europe.

Understandably, most scholarly activity in Indo-European studies occurs in Europe. In the United States only UCLA offers a "dedicated" Indo-European studies program, with an interdisciplinary curriculum that allows students to earn a graduate degree

in their own field.

Richard Diebold's interest in UCLA began in 1992 when he joined Friends and Alumni of Indo-European studies, and he has been a steadfast supporter and committed donor ever since. In 1999 he established the A. Richard Diebold, Jr., Endowment in Indo-European studies to provide comprehensive support for the program. Three years later he created the A. Richard Diebold Endowed Fellowship in Indo-European Studies. The first Diebold Fellow began the program this fall. More recently, Diebold endowed a professorship in Indo-European studies, with support

A. Richard Diebold, Jr., provides broad, endowed support for a program that is the only one of its kind in the nation.

for a graduate fellowship and a book fund.

In total, Diebold's philanthropy has provided more than \$4 million—most of it in endowed funds—for the program.

Because an endowed chair is an honor coveted by academics, the A. Richard Diebold, Jr., Endowed Chair in Indo-European Studies will enable the program to continue to attract and retain eminent scholars and researchers who are highly regarded in their field.

"It's gratifying for me to know that this endowed chair will help UCLA for generations to come by supporting the teaching and research activities of a distinguished faculty member," Diebold said.

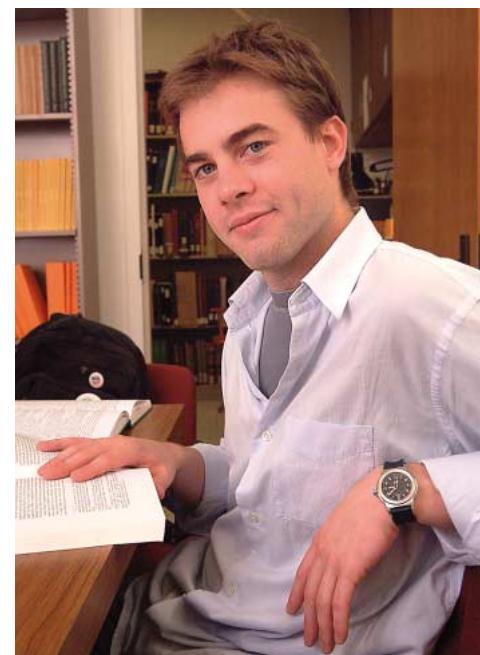
Kanehiro Nishimura, a graduate student who began studying Indo-European languages as an undergraduate in his native Japan, is one of many students whose nonresident tuition is supported by the Diebold Endowment.

"Indo-European studies has accumulated a great deal of knowledge in the last 100 years," Nishimura said. "Support for graduate students will mean that we can pass on what we've learned to future generations."

With establishment of the Diebold Fellowship and the additional fellowship that accompanies the endowed chair, the future of student support in the program is assured. Dieter Gunkel, the first Diebold Fellow, said, "I think the sort of generosity that Richard Diebold exhibits is one of the highest forms of philanthropy. Support for graduate students is important no matter what the discipline, but maybe it's most important for disciplines like Indo-European studies, where the products of research might not always be easily translatable into capital." 



Kanehiro Nishimura, a graduate student supported by the Diebold endowment.



Dieter Gunkel, the first Diebold Fellow.

Giving Back

Philip J. Whitcome Endows an Undergraduate Scholarship in Biology.

Philip Whitcome says he can't complain. He received an excellent education, he enjoys his career, and he has done well. As an undergraduate at Providence College, he majored in physics but was drawn increasingly to life science and decided to come to UCLA for a Ph.D. in molecular biology.

In graduate school Whitcome thought he would become a professor and do research, but the commercial applications of science drew his attention. Later, he held several executive positions with biotech companies, including seven years at Amgen and 5-1/2 years at Neurogen in Connecticut.

Currently, Whitcome travels regularly across the country, helping to start biotech companies that formulate new drugs and devices designed to treat and cure human diseases.

Asked how his UCLA education has shaped his career, Whitcome said, "The education I got at UCLA was absolutely relevant to everything I wound up doing in my professional life."

In appreciation, Whitcome is contributing to UCLA's science programs in two significant ways. Earlier this year, he created an endowed undergraduate scholarship in UCLA's Department of Biology. The Philip J. and Carla K. Whitcome Endowed Undergraduate Scholarship in Biology will be awarded annually to an outstanding student in the life sciences who is interested in molecular biology. Whitcome himself received financial aid as a student, and he wants to provide a similar opportunity for other young scholars and scientists.

"I've been fortunate in my education," Whitcome said. "Somebody else had to pony up in order for me to receive scholarships and fellowships. It's expensive to get an education these days, so I want to help people benefit the way I benefited."

Whitcome is also a member of the new Sciences Board of Visitors, a group of scientists and executives who regularly consult with College faculty and deans to help refine a vision for basic science education and research at UCLA.

"Some science alumni have done very well financially," Whitcome said. "If you get people to sponsor a scholarship or contribute in other ways and give back to the school they went to, that's a positive thing." **CR**

Fate Steps In

Endowed Support from the Evan Frankel Foundation Strengthens Research and Teaching in the Department of English.

Author, screenwriter, and producer Ernest Frankel explains his professional success by invoking 19th-century English novelist Thomas Hardy. In Hardy's novels, the lives of the leading characters are driven by fate—coincidences and chance encounters determine the outcome.

Frankel got his first job in commercial television by taking out his trash at the same time as his neighbor. The neighbor had read Frankel's books and invited him to become a story consultant on his show, the classic "Perry Mason" series. "It's Thomas Hardy time when you meet someone in the driveway and get a job offer," said Frankel.

About 12 years ago, after a long and rewarding career writing and producing for network television, Frankel wanted a change. "I wanted to try to make life better for people," he said, "to pay back for some of the luck that Thomas Hardy gave me." After his beloved uncle Evan died, Ernest worked with two of Evan's friends to chart a new path for the foundation his uncle had created.

In 1996, in a conversation over lunch, Frankel learned that the English Department in the UCLA College had no endowed chairs. Soon afterward, the Evan Frankel Foundation created the Evan Frankel Endowed Chair in English at UCLA, currently occupied by Professor Mark Seltzer, a specialist in 20th-century American literature.

Since establishing the chair, Frankel, a member of the College Campaign Cabinet, has been a generous friend to UCLA and the English Department. This year his foundation created the Evan Frankel Endowed Fellowship in the Humanities, to provide support for talented graduate students in the English Department. Frankel noted, "Some of these outstanding students have a choice of ten universities—they've got that kind of promise—and we want them to choose UCLA."

The Frankel Chair and Fellowship have created a dynamic force that will substantially strengthen both research and education in the department.

Department Chair Thomas Wortham said, "The Evan Frankel Foundation understands that to get superb faculty, you have to have superb students, and to get the best students, you have to have superb faculty. Endowed funds are the only way to guarantee both." **CR**



Kenneth Karmiole at UCLA's William Andrews Clark Library.

Kenneth Karmiole, a well-known Santa Monica dealer in rare books, has established an endowment for UCLA's William Andrews Clark Library and the Center for 17th- and 18th-Century Studies to create an annual lecture series on a subject that is close to his heart: The Kenneth Karmiole Lecture Series on the History of the Book Trade, the first lecture series to be endowed at the Clark, will bring distinguished specialists to the Clark to share their expertise with the UCLA community and the public.

The lecture series is Karmiole's second endowed gift to UCLA. He previously established a graduate fellowship in UCLA's Graduate School of Education and Information Studies.

Karmiole became interested in books when he was an undergraduate at the University of California, Santa Barbara. To find the reading materials he needed for his American studies major, he used the university library and also began to frequent used bookstores, where he met book dealers and learned about trade publications. Soon he was helping out at a bookstore in Santa Barbara.

Karmiole's growing expertise led him to find and sell books to the UCSB library while he was still a student.

"At that time—I graduated in 1968—UCSB was growing tremendously, adding new Ph.D. programs, and they needed research materials," Karmiole said. "So I'd go out looking for books. I learned how to use the library's card catalog and met the acquisitions people. I found scholarly books they needed, and I started selling them to the library."

Because Karmiole found that he enjoyed working with books, he decided to pursue a Master of Library Science degree, with the ultimate goal of working in a university library. He chose to attend UCLA's library

Endowing a Subject Close to His Heart

A gift from rare book dealer Kenneth Karmiole funds the first lecture series to be endowed at UCLA's Clark Library.

school because of its good MLS program, it was convenient to his home, and it offered an emphasis on rare books and manuscripts, which was his special interest.

Karmiole never did take a job in a university library. While he was in graduate school, a Los Angeles bookseller offered him a part-time job. "I worked about 20 hours a week all through graduate school for Heritage Bookshop on Hollywood Boulevard." He continued to work there for several years after receiving his MLS in 1971. Then, in 1976, he started his own business on Westwood Boulevard and moved to larger quarters as his business grew. After ten years of running a successful retail bookstore in Santa Monica, he decided to limit his business to rare books and to operate by appointment only.

"I wanted to downsize, to sell fewer but more important, more valuable books and collections," Karmiole said. Today Kenneth Karmiole, Bookseller Inc. occupies an office behind the Third Street Promenade, publishes a rare book catalog, and participates in antiquarian book fairs around the world.

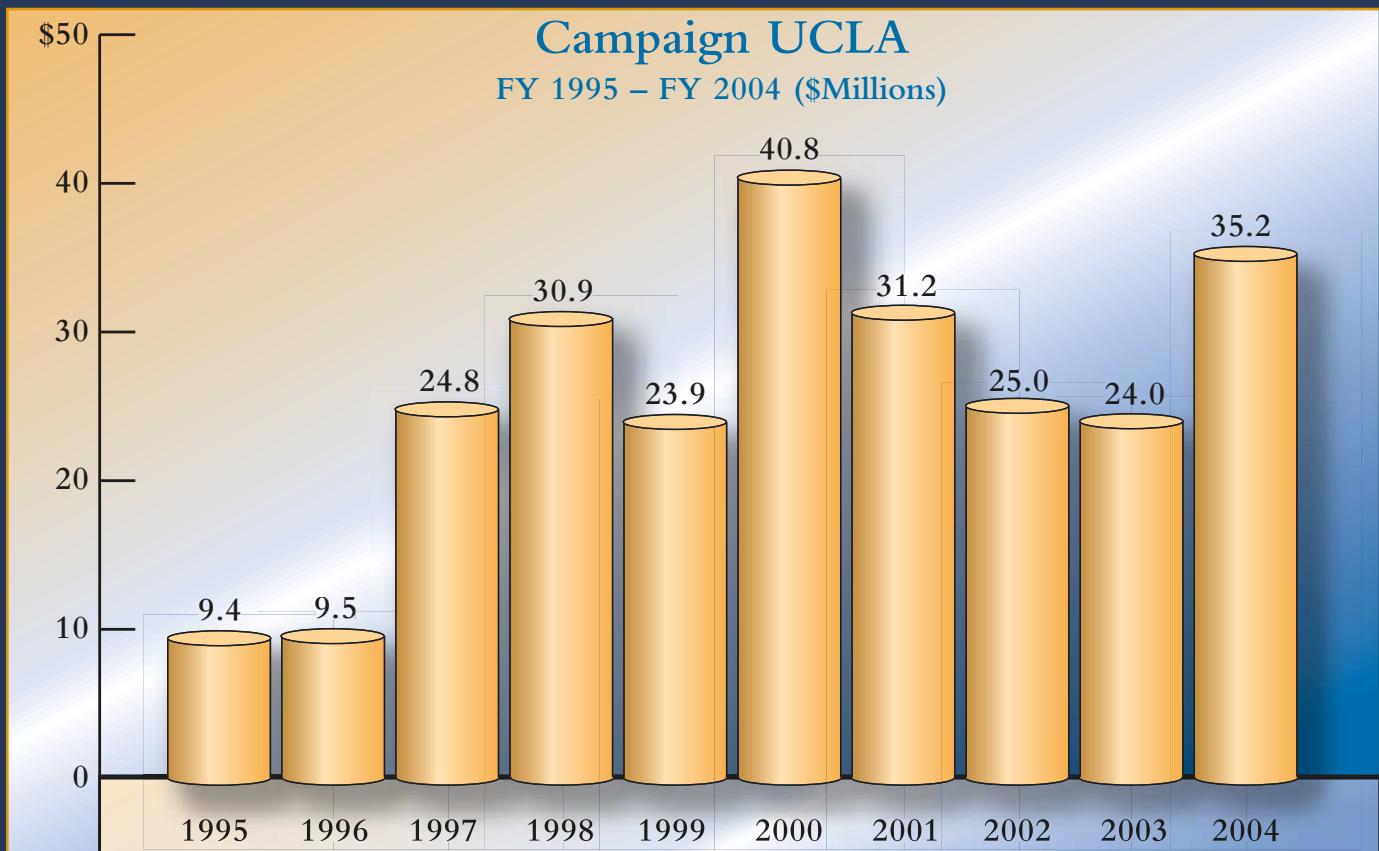
As a UCLA alumnus, Karmiole naturally has gravitated toward the university's Special Collections and the William Andrews Clark Library. He is a member of the Library Associates, a group dedicated to supporting the Clark, and he has been helping the library acquire rare books and manuscripts for a number of years.

"The Clark is a great research institution, with exceptional resources—a place where scholars can find the materials they need," Karmiole said.

The Kenneth Karmiole Lecture Series on the History of the Book Trade, which begins in 2005, will address historical activities and issues associated with printers, publishers, and booksellers, primarily in England during the 17th and 18th centuries. 

*For information about supporting the UCLA College, call Tracie Christensen, executive director of development
(310)206-0699*

UCLA College Continues to Raise Funds at Record Pace



With thirteen months remaining in Campaign UCLA, the College seeks funds to enhance undergraduate and graduate education, provide faculty with resources to improve teaching and expand research, and build state-of-the-art laboratories and teaching facilities. To find out how you can make a difference and participate in Campaign UCLA, contact the UCLA College development office at (310) 206-1953 or send an email to college@support.ucla.edu.

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- ◆ Bequests are a significant source of support to further outstanding work at UCLA.

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For more information, please call Chad Holman at UCLA Office of Gift Planning (800) 737-8252 www.giftplanning.ucla.edu



Students from the College participate in a role-playing exercise for a program on gang intervention offered through the Center for Community Learning, the organization in the UCLA College that creates academic opportunities and internships for undergraduates through service or research in community-based organizations. For more on the Center for Community Learning, see page 20.

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