

Winter 2008

Volume Nine

# UCLA COLLEGE

---

R E P O R T

**UCLA** COLLEGE OF LETTERS AND SCIENCE

6

### An Academic Gem Returns

After two years under wraps, the renowned collections of the William Andrews Clark Memorial Library are once again open to the public and to the scholars of the world.



8

### A Master of Narrating the Incomprehensible

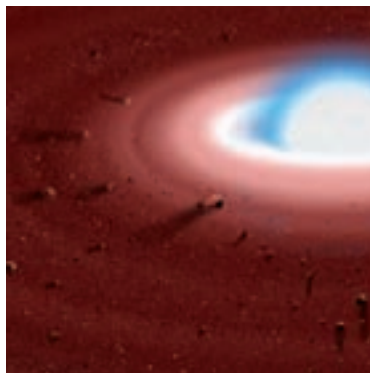
Historian Saul Friedlander brings to a close his work on Nazi Germany and the genocide of the Jews with an award-winning volume.



10

### Something Dramatic and Violent

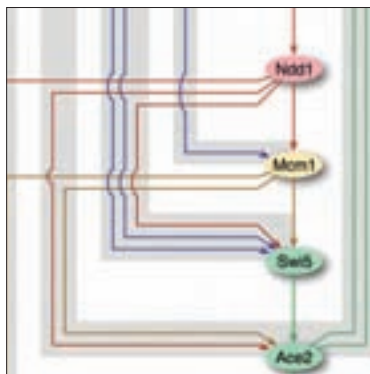
Astronomers in the College have identified clues in a cosmic catastrophe which may show evidence of the formation of planets like Earth.



### Exploring the Struggle for Social Justice

Ruth Milkman explores the evolving trends that make Los Angeles a catalyst for change in the American labor movement.

12



### Computing the Explosion in Genetic Information

Matteo Pellegrini is using computer technology to help biological scientists expand the possibilities for genetic research.

14



### Success Stories

Four UCLA students talk about how the university's Academic Advancement Program, the nation's largest student diversity program, supported them in their challenges—and triumphs.

16

#### On the cover:

The Mildred E. Mathias Botanical Garden at UCLA is a haven for research, teaching—or for peaceful reflection on a busy campus day. The seven-acre Mathias Garden, located on the east border of the UCLA campus, is a living museum that maintains one of America's largest outdoor collections of tropical and sub-tropical plants. The garden also offers public education programs, and serves as an outdoor classroom for undergraduate courses and graduate training in several UCLA departments.

Managed within the College by Arthur Gibson, professor in the Department of Ecology and Evolutionary Biology, the UCLA Mathias Garden is open to the public every day. For information about the gardens or to arrange a docent-led tour, visit [www.botgard.ucla.edu](http://www.botgard.ucla.edu).

Unless otherwise indicated, all photos by Reed Hutchinson.

## S n a p s h o t s

### College News

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

4

### Great Futures for the College

The impact of philanthropy on the College.

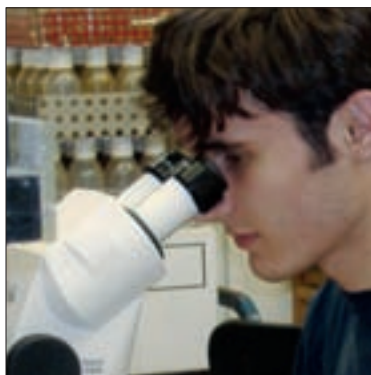
28

# UCLA COLLEGE

## R E P O R T

### 18 New Clues to a Killer's Identity

Chemists at UCLA and in Italy produce a key advance that may help solve the mystery of Lou Gehrig's Disease.



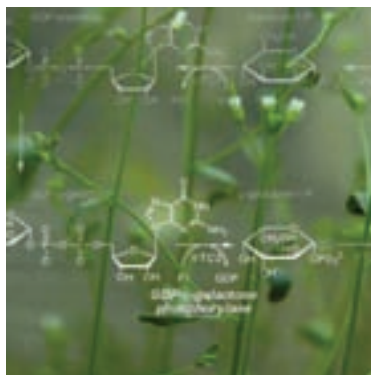
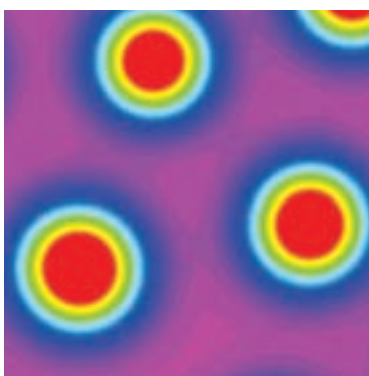
### Undergraduates at the Forefront of Discovery

A record number of students participate as authors of research that becomes a major genetics study.

24

### 20 Finding Patterns in Crime

An anthropologist joins forces with mathematicians and local police departments to bring innovative new techniques to the study of crime.



### The Mysterious Seventh Step

The study of a worm leads, step-by-step, to a breakthrough in the study of vitamin C in plants.

26

### 22 Building Bridges Between Cultures and Colleagues

Rafael Pérez-Torres, the newly-appointed chair of the Department of English, finds focus in his research and teaching by exploring commonalities between people—even while recognizing their differences.



### UCLA College of Letters and Science

**Patricia O'Brien**  
Executive Dean

**Reynaldo F. Macías**  
Acting Dean of Social Sciences

**Emil Reisler**  
Dean of Life Sciences

**Joseph Rudnick**  
Acting Dean of Physical Sciences

**Judith L. Smith**  
Dean and Vice Provost of Undergraduate Education

**Tim Stowell**  
Dean of Humanities

[College Development](#)

**Tracie Christensen**  
Assistant Vice Chancellor

**Judith Forman**  
Development Communications

[College Marketing](#)

**Harlan Lebo**, Director

[Media Relations](#)

**Meg Sullivan**  
**Stuart Wolpert**

[Design](#)

**Robin Weisz/Graphic Design**

Please address comments to  
hlebo@support.ucla.edu

© Regents UC 2007

Dear Friends:

Recently in an interview about my stepping down as executive dean, a *Daily Bruin* reporter asked me what moments stand out as special for me in my three-and-a-half years in this office. I have had many moments of special pleasure, but the one that came to my mind first was our June 2007 commencement, as I walked down the center floor of a packed Pauley Pavilion with Kareem Abdul-Jabbar. The students erupted as they caught sight of him and greeted him with awe, respect and roaring cheers.

I told Kareem that I had never seen a student response quite like that, so powerful and so moving. Kareem stands for excellence and achievement. He represents all that is best about UCLA.

I have been privileged to meet so many people of quality at UCLA—staff, faculty, students, alumni and friends. I cannot name them all here, but a few are emblematic of the extraordinary support I have received as executive dean.

Working with Ralph and Shirley Shapiro to create the Shapiro International Fellows has been a profoundly rewarding experience. When I met Ralph at a lunch in June 2004, before I started in this job, he asked me how he could help. He and his wonderful wife, Shirley, have been helping me ever since. Paul Terasaki, a Bruin through and through who spent 35 years as a faculty member in the Geffen School of Medicine, has a vision of making the world a better place by promoting understanding between Japan and the United States. He is one of the College's strongest supporters.

Jim Collins is the most farsighted and enlightened of donors, and someone who has inspired me with his intelligence and wonderful humor.

Garen Staglin was my partner in the last two years of the victorious College campaign, and continues to challenge me with his own compelling vision and his unflagging commitment to UCLA's success. He and his wife, Shari, bring their intense energy to the task of shaping UCLA's future, and I have learned so much from working with them.

And let me tell you a bit about Casey Wasserman, a young alumnus who has high expectations for UCLA. Casey is passionate about education and about helping students from underserved communities. He is a big thinker with a big heart and a tough intellect. It has been a joy to get to know him and work with him on new undergraduate initiatives.

Since I am stepping down, I am going to exercise the prerogative of violating the unspoken rule of leaving the behind-the-scenes people unmentioned and out of sight. One of the truly visionary people in the College is a member of the staff, Tracie Christensen, who is assistant vice chancellor and head of College Development. Tracie not only understands the academic mission, she champions it so effectively. It is



*Patricia O'Brien and Kareem Abdul-Jabbar  
at the 2007 College Commencement*



*Pat with Casey Wasserman*

not an accident that she and her team have raised more support for faculty and students in the College than ever before in history. What a privilege it has been to work with her.

The president of the UCLA Alumni Association, Yolanda Nunn Gorman, who has three degrees from UCLA and proudly bleeds blue and gold, has dedicated many hours to advancing the role of alumni in the academic mission of the College. I would also like to acknowledge Janina Montero, vice chancellor of student affairs. Janina gives administration a human face and has been an unfailingly kind and supportive colleague.

UCLA students are amazing. Two whom I have met this year, Addar Weinstein and Kelly Haddigan, are dedicated to improving the student experience. Their particular mission is the creation of an undergraduate business degree. They carefully developed their research, did their homework and are leaving no stone unturned in advocating for programs that respond to the interests and career needs of our students.

I am going to end this reflection with some observations about UCLA faculty, since everything begins and ends with them and the quality of their research and teaching. It has been an honor to work with each of you.

Let me mention just a handful of the faculty leaders who make this place so special and who supported me in what I needed to do: Ali Behdad, who has crafted a vision for the humanities that will keep UCLA in the national vanguard of leading-edge research; Ty Cannon, whose commitment to curing mental illness is so inspiring; Andrea Ghez, whose stellar research accomplishments are matched by her commitment to quality-of-life issues for faculty and to the special needs of women faculty and their families; and Abigail Saguy, whose willing engagement as a junior faculty member is so admirable. These and many other faculty are first-rate scholars doing groundbreaking work in their own fields, and they are also the best of university citizens.

UCLA is a better place because of these dedicated and generous people.

UCLA faces real challenges ahead in recruiting and retaining the best faculty, in supporting diversity in all aspects of our mission, and in promoting excellence in the face of shrinking state support. I am glad I have been able to help in meeting some of these challenges.

Sincerely,



Patricia O'Brien  
Executive Dean  
UCLA College of Letters and Science



Tracie Christensen, assistant vice chancellor for College development (left), and Betty Huang, who, along with her husband, S.L., is an active donor-volunteer in the College



Pat with Paul and Hisako Terasaki

# College News

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

## UCLA Stem Cell Institute Receives \$20 Million from Broad Foundation

A gift from Eli and Edythe Broad positions UCLA for leading-edge research in a critical emerging field.

The Eli and Edythe Broad Foundation is donating \$20 million to fund adult and embryonic stem cell research at UCLA, enhancing a program that brings together scholars from fields across the university to develop treatments for cancer, HIV/AIDS, Parkinson's disease, metabolic disorders and other medical conditions.

In recognition of the gift, the Institute for Stem Cell Biology and Medicine at UCLA has been renamed the Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research at UCLA.

The gift will be used to purchase specialized, high-tech laboratory equipment and will support faculty recruitment through research grants and endowed professorships, enabling UCLA to continue its leadership in cutting-edge, multidisciplinary scientific and medical research.

Owen Witte, director of the Institute, a professor of microbiology, immunology and molecular genetics in the College,



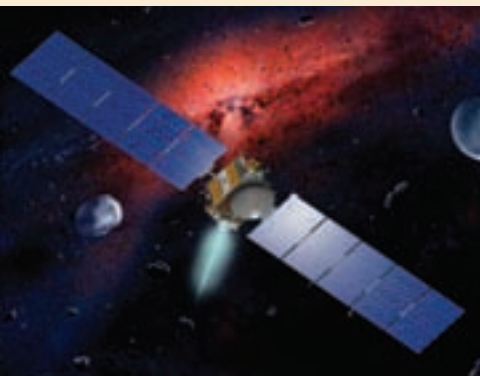
Hanna Mikkola, one of the first faculty recruited to the UCLA Stem Cell Institute, briefs governor Arnold Schwarzenegger (center), Eli Broad (front right), Los Angeles mayor Antonio Villaraigosa (right), the media, and UCLA staff and faculty about the workings of her lab following the announcement of a \$20 million gift from the Broad Foundation to the Institute.

and a Howard Hughes Medical Institute investigator, said the gift will help UCLA advance its science more quickly, positioning stem cell center scientists at the leading-edge of this emerging field.

"Embryonic stem cells hold tremendous potential for treating many life-threatening diseases because they have

the ability to develop into every type of human tissue," said Witte. "With the Broad Foundation gift, we will be able to continue to make great strides in learning how stem cells self-renew and differentiate and to potentially translate that knowledge into treatments for the many serious ailments that plague society."

[www.stemcell.ucla.edu](http://www.stemcell.ucla.edu)



A three-billion-mile journey begins—the Dawn spacecraft launched September 27 on its unique odyssey to study a pair of asteroids, with UCLA researchers directing the science mission.

"Dawn will travel back in time by probing deep into the asteroid belt," said Christopher Russell, principal investigator for the Dawn mission and UCLA professor of geophysics and space physics. "This is a moment the space science community has been waiting for since interplanetary spaceflight became possible."

Dawn's explorations of the asteroid Vesta in 2011 and the dwarf planet Ceres in 2015 are key space science priorities because these two icons of the asteroid belt may hold answers to fundamental questions about our solar system's history. Dawn's science instrument suite will measure elemental and mineral composition, shape, surface topography, and tectonic history, and will also seek water-bearing minerals.

"Ceres and Vesta have been altered much less than other bodies," Russell said. "The Earth is changing all the time. The Earth hides its history, but we believe that Ceres and Vesta, formed more than 4.6 billion years ago, have preserved their early record frozen into their ancient surfaces."

For mission background and updates, visit <http://dawn.jpl.nasa.gov>.

## A College Education for the 21st Century

A pilot federal program will involve UCLA science students in a national project to identify information for a new genomic encyclopedia.

The college educational experience for undergraduate science study is being redefined by a new federal pilot program at UCLA. Some undergraduate students in the life sciences will conduct a new type of original research in laboratory courses that are part of a national information-gathering project.

“No one will know ahead of time what they will find; it will be their own original work—a college education for the 21st century,” said Erin Sanders-Lorenz, academic coordinator for the UCLA Department of Microbiology, Immunology and Molecular Genetics and an instructor for undergraduate laboratory courses.

The pilot program is run by the U.S. Department of Energy’s Joint Genome Institute, which is producing the Genomic Encyclopedia of Bacteria and Archaea. UCLA, one of 12 universities selected for the pilot program, will adopt one microorganism for students to analyze. The students will use bioinformatics—a biological research method that involves using high-speed computers—to analyze DNA and protein data, and to search for genes that encode proteins. “Instead of memorizing facts, students will learn for themselves, think like scientists and apply their knowledge to a scientific problem,” said Sanders-Lorenz. “Science doesn’t mean as much until you roll up your sleeves and get your hands dirty.”

## Student Outreach with a Lifesaving Mission



Volunteer physician Rene Trabanino (left) examines patients at a temporary medical center that is also staffed by UCLA undergraduates (above) from Chicanos for Community Medicine.

Within a half-hour of their arrival in the impoverished Mexican community of Cerro Azul, 22 UCLA undergraduates who are members of Chicanos for Community Medicine had turned a derelict building without electricity into a one-stop relief center, complete with a waiting room, examining room, pharmacy, a repository for medical records, and a distribution center for food and donated clothes and toys.

The medical relief program is supported by Chicanos for Community Medicine (CCM), a service group of UCLA undergraduates that teams with medical faculty to provide health care to day laborers, farm workers and the underserved.

For eight years, CCM traveled four times a year to the community on the outskirts of Tecate. The students—most of them studying biological sciences in the College—are accompanied by nurses, doctors, interns, a pharmacist, and medical students.

The clinic was started by Takashi Michael Wada M.D. '94, M.P.H. '02. When members of CCM learned of Wada's activities, they asked to accompany him. Soon the undergrads were raising money to buy medical equipment, medication and food for Cerro Azul residents—as well as for Los Angeles day laborers and Central Valley farm workers. Now the students arrange transportation and enlist professional volunteers, including doctors, pharmacists and dentists.

“Without us, they don't have medical care,” says Marc Montecillo, a first-year UCLA medical student who started making the trips as a UCLA biology major. “It's a very important job that we're doing here.”

## Science Faculty Research Series Offers Seven Public Lectures for 2007–08

The College's lecture series that highlights faculty research continues in 2007–08 with seven public programs by renowned scholars.

Speakers for the sixth annual UCLA Science Faculty Research Colloquium Series, sponsored by the Divisions of Physical Sciences and Life Sciences, are:

- **Geraldine Weinmaster**, Biological Chemistry
- **Robert B. Goldberg**, Molecular, Cellular and Developmental Biology
- **Jeffery F. Miller**, Microbiology, Immunology and Molecular Genetics
- **Andrea Ghez**, Physics and Astronomy
- **Stanley J. Osher**, Mathematics
- **James C. Liao**, Chemical and Biomolecular Engineering
- **Michael Fanselow**, Psychology & Behavior, Behavioral Neuroscience

For dates and times, visit [www.physicalsciences.ucla.edu/colloquium.asp](http://www.physicalsciences.ucla.edu/colloquium.asp)

# AN ACADEMIC GEM RETURNS

After two years under wraps, the renowned collections of the William Andrews Clark Memorial Library are once again open to the public and to the scholars of the world.





By Meg Sullivan

When the William Andrews Clark Memorial Library closed its basement research facilities two years ago—including all of its renowned holdings—for a much-needed renovation, faculty member Max Novak was working on a new, annotated edition of *Robinson Crusoe*.

“I was one of the last people to be thrown out,” Novak recalls with a laugh.

Initially, Novak—one of the world’s leading authorities on Daniel Defoe and a distinguished professor of English and Comparative Literature at UCLA—felt confident that he had finished the research he needed for his project on the classic 18th-century tale of a castaway on a tropical island. But then as Novak reflected on his work, he recognized that broader exploration was needed.

“It would have been nice if I could have just run down to the Clark to check, but that wasn’t possible,” said Novak.

Novak tried to follow his hunch by visiting no lesser institution than the British Library, but all to no avail. So when the Clark Library—located in the West Adams district of Los Angeles 11 miles east of UCLA—reopened August 1, Novak was the first customer through the door at 9 a.m.

“To do this kind of work, you’ve got to have room and time to follow where things lead,” Novak said. “You need a great library for that, and the Clark is a great library. It was such a relief to have this resource back.”

Novak wasn’t alone. As word spread of the re-opening of the stacks where most of the library’s holdings are kept, scholars started streaming in from all over the world.

Frequently described as “a hidden gem,” the library was donated to UCLA in 1926 by Los Angeles philanthropist William Andrews Clark, Jr., in honor of his father. Building on the original book collection, UCLA has turned the Clark Library into a powerful scholarly draw.

The Clark, managed in the College through the Center for 17th and 18th Century Studies, specializes in English literature, culture and history from 1640 to 1800. Among the highlights of the collection is the largest compilation of works outside of the British Library by and about the 17th-century poet and playwright John Dryden. The Clark also houses the world’s largest collection of works by and about Oscar Wilde, the 19th-century poet, novelist, playwright and wit.

The shutdown was unavoidable once library staff discovered signs of moisture creeping into the two subterranean annexes where the library’s holding are kept.

“Higher than acceptable humidity levels led to an outbreak of mold on some of our books in 2004,” said Bruce Whiteman, head librarian at the Clark. “Although we were able to contain and eliminate the mold, experts told us that it could recur unless a major overhaul was undertaken.”

The renovation started in October 2005, when Clark staff began packing up close to 70,000 books and manuscripts. The project entailed more than 7,000 file cartons and “a mountain of bubble-wrap.”



“The Clark is a great library. It was such a relief to have this resource back.”


With precious books and manuscripts safely ensconced at the university’s Southern Regional Library Facility, crews sandblasted the Clark’s annexes and sealed them against moisture.

According to Kurt Alexander, manager of the project, they then replaced aging ductwork, installed specially designed vents that ensure that air circulates constantly between the annexes’ tight book shelves, and increased the size of the chiller—essentially the lungs of the new system. Fire warning and suppression systems were installed throughout the 3726 square feet of the annexes.

Despite the disruption, the library’s role as the glittering salon for the world’s scholars conducting research on the 17th and 18th centuries continued apace. Because the historic 1926 structure was not touched by the renovations, it continued to host special programs, including 20 scholarly conferences or lectures, two poetry readings and 13 chamber music concerts.

Still, Novak wasn’t the only Clark regular to be relieved to see an end to the work. To mark the occasion, Clark officials launched a new lecture series. Funded with a new grant from William Zachs, a prominent book collector based in Scotland, the biennial William Andrews Clark Lecture on Oscar Wilde explored themes in the work of the beloved author. For the October 14 event, the guest lecturer was Merlin Holland, arguably the most famous Wilde scholar active today and the grandson of Wilde himself.

The occasion allowed the Clark to showcase a bevy of new acquisitions, including a 12,000-volume book collection donated to the library when the Heritage Book Shop, a Hollywood rare book shop, closed last summer. Novak—and legions of scholars and other enthusiasts drawn to the wealth of the collection—couldn’t be happier.

“I first came to the Clark as a graduate student in the early 1950s,” he said. “I found that the Clark was invaluable. It has books that aren’t in any other libraries. It enables one to make unique connections.” 

# A Master of Narrating the Incomprehensible

Historian Saul Friedlander brings to a close his work on Nazi Germany and the genocide of the Jews with an award-winning volume.



*Saul Friedlander: “Historians very often, without acknowledging it, have some personal reason to deal with a specific topic.”*

There are times when the only way to deal with life’s most incomprehensible events is by narrating them as vividly and accurately as possible. Professor of history Saul Friedlander, who holds the 1939 Club Chair in Holocaust Studies and whose parents were killed during the Nazi Holocaust, is a master of this art.

The concluding 2006 volume of his acclaimed historical narrative about the genocide of the Jews, *The Years of Extermination: Nazi Germany and the Jews, 1939–1945*, is likely to be one of the last accounts by a noted historian who survived Hitler’s “final solution.”

In October, in recognition of his works, Friedlander received the 2007 Peace Prize of the German Book Trade, the top award at the Frankfurt Book Fair. Friedlander talked to writer Ajay Singh about what it was like for him, personally and professionally, to chronicle the Holocaust.

## **You are noted for keeping the history of the Holocaust alive. Why has this scholarship been so important to you?**

Historians very often, without acknowledging it, have some personal reason to deal with a specific topic. Whether the reason is personal, social or political, there is an element of subjectivity. As I was a child in Europe during World War II and went into hiding, it’s not so astonishing that years later I decided, after studying political science, to change direction and go back to this topic.

## **Was history always something you wanted to pursue or did you somehow fall into it?**

I didn’t fall into history but I was drawn to it because of the domains I wanted to study. It’s true I could have approached them via political science, but I really had a need to approach this specific past in a more narrative than purely analytic way.

## **As a survivor-historian, what is it like to live with the memory of the Holocaust?**

It creates a problem in the sense that when I work on the materials, I am sensitive to them more directly than, I guess, people who are totally unrelated to these events. But then again, strangely enough, it’s not something that has stopped me from doing this specific research and writing. The most gruesome aspects are not the ones that influence me—it’s the unexpected, small details that sometimes bring up emotions that I did not know were even there.

### Could you give an example?

While researching the second volume of my book, *Nazi Germany and the Jews*, which deals with the years of extermination and where I encountered the most difficult material, I came across by pure chance a letter of a young French-Jewish girl announcing to her father that the next day she was being deported from Drancy, which was an assembly camp for Jews near Paris, to the east. She didn't know about Auschwitz but she was going to Auschwitz. In her letter, she tries to cheer her father up and hide from him what she knows. She tries to say everything will be alright—I will soon be back, I'm going with friends, we are many who go together, don't worry... This kind of both naïve and touching letter, very loving toward her father, unsettled me much more than some documents describing the worst atrocities.

### In your writings you suggest that history and memory are always intertwined. Given that memory is often imperfect, do you think narrative history is often mythologized by that relationship?

No. This was an argument that was brought by a German historian 20 years ago against Jews trying to write the history of the Holocaust. The historian, Martin Broszat, and I had an exchange in which I had to ask him whether it was less of a burden for a historian who had been a member of the Hitler Youth (after he passed away, it also came out that he had been a member of the Nazi party) than for me. But historians have to have enough self-awareness and professional integrity to control their own subjectivity.

### What do you think is likely to happen to the memory of the Holocaust after its last survivors pass away?

In my opinion, these events, for reasons I cannot explain very well—maybe because they were so extreme in terms of human evil—seem to be deeply anchored not only in the German imagination or that of the Jews but in the Western imagination.

These events were part of Western civilization as a whole, beyond Germany. In France a year ago, a novel, *Les Bienveillantes* (“The Kindly Ones”), about the activities of an SS officer, was published. Its success was absolutely enormous, unexpected, unexplained and unexplainable. Its American author, Jonathan Littell, was hardly known. The killing of the Jews is described in gruesome detail. So you see, this theme, from whatever angle you take it, seems to be coming back.


### Why do you think the world knows so much more about the Holocaust than about other mass exterminations of people?

It has to do with a concrete historical reason: The Holocaust happened in the midst of the European continent—in a country, Germany, which documented very thoroughly its own murderous actions and kept very careful records of the agencies involved. So when Germany was defeated and its archives were opened to researchers after World War II, all the material about the events were found. Plus, of course, the survivors, who very often were literate people, could tell or record what they had seen or gone through. A considerable number of diaries were written during the events.

There is a second reason, which I believe, but it is a hypothesis. We have had terrible genocides since World War II—in Cambodia, Rwanda, the Soviet Union under Stalin, and in China. Of China, for example, we know very little because of course the Chinese are not going to let you into their archives. These massacres have shaken the minds of many.

But the systematic, long-drawn and thorough mass murder during the Holocaust, and the whole preparation of the atmosphere of it, meant not leaving one single person of that group (Jews) alive. And not only the thoroughness and the intention of absolute annihilation of living beings but whatever they created.

For example, an institute was established in Germany to cleanse the New Testament of its Jewish elements. And when the Nazis discovered that the man who wrote the libretti for three of four of Mozart's most famous operas was an Italian Jew, they had the texts retranslated in order not to have to use a libretto written by a Jew. They tried to cleanse whole libraries of Jewish books. They asked students writing dissertations to make a distinction between Jewish authors and non-Jewish authors in their bibliographies. It was an obsession that looks to us a total collective craze.

This is what stuck in the (Western) imagination—not only the horror of it but also the kind of absolutely pathological expressions of anti-Jewish obsession. 

**“The most gruesome aspects are not the ones that influence me—it’s the unexpected, small details that sometimes bring up emotions that I did not know were even there.”**

# Something Dramatic and Violent

Astronomers in the College have identified clues in a cosmic catastrophe which may show evidence of the formation of planets like Earth.

By Stuart Wolpert

**A**re planets like Earth more common in the universe than we might think?

The chemical fingerprint of a burned-out star about 150 light years from our solar system indicates that Earth-like planets may not be rare in the universe

Astronomers in the College report that a white dwarf star known as GD 362, which is surrounded by dusty rings similar to those of Saturn, has been contaminated by the destruction of a large asteroid that left more than a dozen observable chemical elements in the atmosphere of the star.

Such an observation is unprecedented in astronomy. Was there some kind of violent interaction between the star and the asteroid?

This particular white dwarf—a star in its dying period that has become overwhelmingly dense while shrinking to approximately the size of our Earth—is located in the constellation Hercules. The UCLA researchers, led by professor of astronomy Benjamin Zuckerman, think that after about a billion years orbiting the white dwarf as part of an ancient planetary system, an asteroid got close enough to the star to be torn apart by its very strong gravity.

The asteroid broke apart into dust particles that orbited the

white dwarf; eventually the dust “polluted” the white dwarf’s atmosphere, said Zuckerman.

“The relative abundance of the elements in the white dwarf’s atmosphere, polluted by the asteroid, appears similar to those in our Earth–Moon system,” Zuckerman said.

In the research, funded by NASA, the UCLA group reports the first detailed assessment of the elemental composition of an object in a planetary system outside of our own.

The study implies that the forces that made the Earth and our inner solar system seem to have occurred in this system, and probably around other white dwarfs as well, said Michael Jura, a professor of physics and astronomy and co-author of the research.

“What we have here is a composition of the white dwarf that is fairly similar to that of the inner planets of our solar system,” said Jura. “Are there other terrestrial planets like Earth in other solar systems? This white dwarf’s fingerprint is a significant advance in demonstrating that something like terrestrial planet formation occurred around this other star and probably occurred around other stars as well, because it suggests the Earth’s composition is not unique.”

The group of astronomers, which includes UCLA associ-

*An artist's rendering of what a dust disk might look like around the white dwarf star GD 362—a trail of evidence that is providing insight into the birth of new planets.*

ate professor Brad Hansen, UCLA graduate student Carl Melis, and Detlev Koester at Germany's University of Kiel, detected 17 elements in the atmosphere of the white dwarf that probably came from a large asteroid; the asteroid may have once been part of a larger body similar to one of the inner planets of our solar system. Many of the elements have never before been detected in the atmosphere of a white dwarf, including the rare elements strontium and scandium.

The astronomers used the HIRES spectrometer on the Keck I Telescope at the W.M. Keck Observatory in Hawaii to take optical spectra of the white dwarf, spanning from the ultraviolet to the full visible range of light. Each element can be identified by its own characteristic spectrum.

Zuckerman said the research findings do not rule out the possibility that two planets in this ancient planetary system collided and the orbiting dust and detected elements are from a piece of one of the colliding planets rather than from a more conventional asteroid.

"Something dramatic and violent probably happened," he said.


What knocked the asteroid out of its original orbit? It probably was deflected by the gravitational field of a large planet, Zuckerman said.

The research could give clues to what our solar system will look like when our sun dies and becomes a white dwarf star some five billion years from now.

Our own planetary system looks very stable, Zuckerman said, but billions of years from now, when the sun starts to expand in size and lose mass rapidly, the planets and asteroids will spiral away, and the planets closest to the sun, like Mercury and Venus, will be engulfed by the sun and destroyed.

"But other planets, probably including the Earth and the asteroid belt between Mars and Jupiter will spiral out, and their orbits then will make our stable system much less stable," he said.

In a separate study conducted in the Zuckerman group that also has implications for understanding the formation of planets, researchers found that rocky terrestrial planets, perhaps like the Earth or Mars appear to be forming or recently formed around a star in the Pleiades ("seven sisters") star cluster—the result of a "monster collision" of planets or "planetary embryos."

"This is the first clear evidence for planet formation in the Pleiades, and the results we are presenting may well be the first observational evidence that terrestrial planets like those in our solar system are quite common," said Joseph Rhee, a UCLA postdoctoral scholar in astronomy, and lead author of the research. 

By Dan Gordon

In the small Maryland town where sociologist Ruth Milkman grew up in the 1950s, discussions about the American labor movement were far from commonplace. But Milkman credits her mother with instilling in her an understanding of the vital role of the workplace in the struggle for social justice.

“When I was a young child, she introduced me to the idea of unions and what the labor movement was all about,” said Milkman.

In a career that spans more than a quarter-century—the last 19 years at UCLA—Milkman has become a leading academic voice on issues relating to the changing sociological dynamics of work and labor organizing. A professor of sociology and director of the UCLA Institute for Research on Labor and Employment, Milkman works to explain trends in the U.S. labor movement—research that led her to study, among other emerging issues, immigrant workers and their prominent role in the transformation of Los Angeles from a city once seen as an anti-labor company town into a hotbed of union activity.

In *L.A. Story: Immigrant Workers and the Future of the U.S. Labor Movement*, published in 2006 by the Russell Sage Foundation, Milkman analyzed the forces driving this change. She also looked into the conditions under which immigrants—particularly those who are undocumented—can be organized.

Her conclusion was one she didn’t expect to reach before undertaking the research: far from resisting organized labor’s overtures, immigrants have been more receptive to unionism than many other worker groups—which goes a long way toward explaining organized labor’s recent success in Los Angeles.

“A decade ago, the conventional wisdom was that immigrants from Mexico or Central America were unlikely to be discontent with even minimum-wage jobs, figuring those jobs paid better than what they had earned before coming here,” Milkman said. “Many thought that undocumented immigrants would be reluctant to take the kinds of risks involved in union organizing. They thought that a ‘sojourner mentality’—the idea that immigrants were just here to make some money for a couple of years before returning home—would keep them from getting involved in a long-term struggle for unionization.”

*L.A. Story*, which examined the plight of workers in four industries in Los Angeles (building maintenance, trucking, construction, and garment production), showed that these assumptions were unfounded. Tighter border enforcement has increased the likelihood that immigrant workers will be here for the long haul.

As for the issue of risk, Milkman concluded that most immigrants have had experiences—crossing the border among them—that make the potential perils involved in union organizing seem minimal by comparison. Far from being reluctant participants, the mostly Latino

# Exploring the Struggle for Social Justice

Ruth Milkman explores the evolving trends that make Los Angeles a catalyst for change in the American labor movement.



David McNew/Gettyimages

immigrant workers—who filled jobs that worsening conditions had caused native-born workers to leave—were predisposed to see their fate as being linked to their community. And they were able to tap into the tightly knit social networks they had already developed as a means for daily survival.

Los Angeles has emerged as a beacon of progress for the labor movement. Milkman notes that the Service Employees International Union (SEIU), which led the city’s successful Justice for Janitors campaign and is widely considered the labor movement’s most active growth engine, has always had a stronger presence here than in other parts of the country. Unions in Los Angeles have also successfully employed what Milkman sees as key ingredients in the labor movement’s resurgence: new leadership, latitude to experiment with organizing techniques, and a willingness to embrace new strategies.

Sharp declines in union membership since the mid-20th century have led many observers to dismiss organized labor as irrelevant. Today’s unions face daunting challenges that include competition from global markets where labor is cheaper and worker rights fewer, significant opposition in the political arena, and a poor reputation among many working people.

While acknowledging these problems, Milkman also believes organized labor’s demise has been exaggerated.

“The manufacturing unions that were once so central to the labor movement are not doing well,” she said. “But when

you take a broader look at unions like SEIU and you look at what’s going on in the low-wage sector among janitors and hotel workers—people struggling for living wages—there’s a lot more activity than people realize.

“Given that California tends to be a trend-setter, there’s reason to think that some of the labor-related trends that are emerging here, where unionization rates are holding steady during a national decline, might spread to other parts of the country.”

Milkman has also seen growing academic interest in labor issues on the UCLA campus over the years, stoked by the UCLA Institute for Research on Labor and Employment, which supports faculty and graduate student research on employment and labor topics, sponsors public programs, and is home to the undergraduate minor in Labor and Workplace Studies.

In addition to supporting research from multiple disciplines

on a variety of topics, the institute, which Milkman has headed since 2001, serves as a bridge between the university and the labor community.



Ruth Milkman: “The manufacturing unions that were once so central to the labor movement are not doing well. But when you look at what’s going on in the low-wage sector among janitors and hotel workers (such as the union members shown below left at a 2005 demonstration in Los Angeles), there’s a lot more activity than people realize.”



“This work is beneficial to both sides,” she said. “We open a door so that labor can get access to university knowledge and resources, and our faculty and students gain access to what’s occurring on the ground, in the community.”

The institute is also housing Milkman’s newest research undertaking, supported by a grant from the Haynes Foundation, which seeks to document the extent and types of labor-law violations taking place in unregulated settings involving low-wage and immigrant workers.

At the undergraduate level, Milkman was instrumental in starting “Work, Labor and Social Justice in the U.S.,” a course in the College’s General Education Cluster Program. “I perceive much more interest among students in these issues than when I first came to UCLA,” Milkman observed.

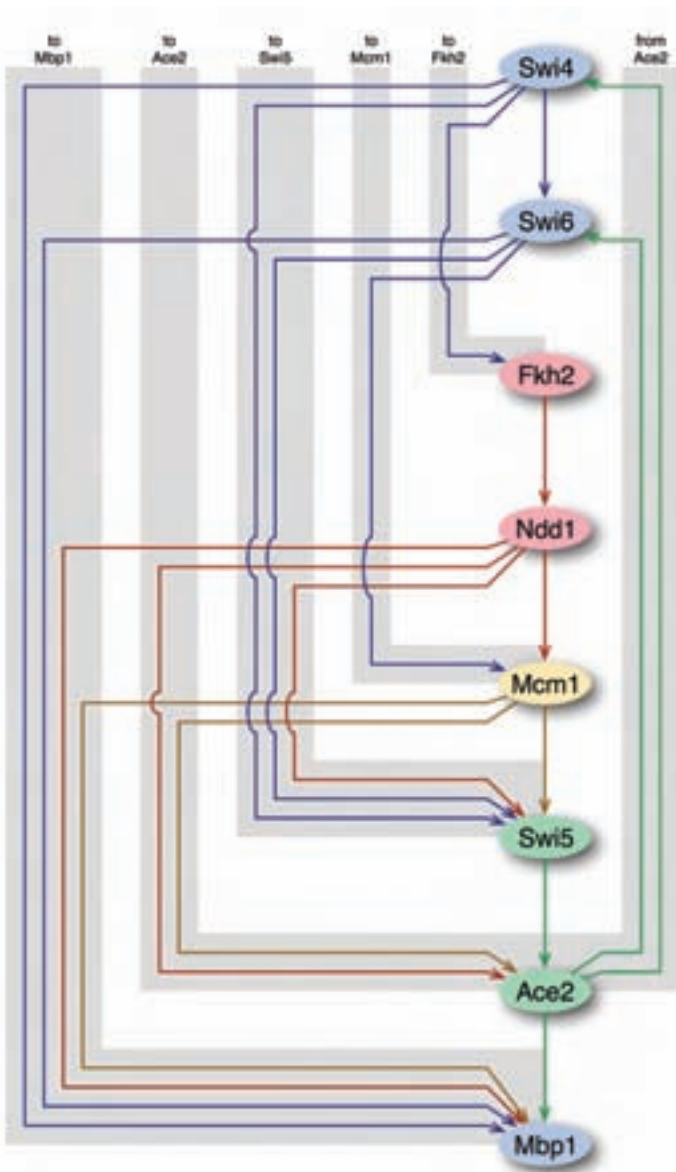
As for unions, despite the challenges, she has no doubt that they will always play a significant role in this country.

“As long as we have a capitalist economy,” Milkman said, “workers are going to look for ways to organize in their own interests.”

**“Given that California tends to be a trend-setter, there’s reason to think that some of the labor-related trends that are emerging here, where unionization rates are holding steady during a national decline, might spread to other parts of the country.”**

Matteo Pellegrini is using computer technology to help biological scientists expand the possibilities for genetic research.

# Computing the Explosion in Genetic Information



*A network that shows the interactions between molecules that regulate the division of yeast cells—a visual computation created in the lab of Matteo Pellegrini.*

In 2001, science reached an important milestone in the discovery of the building blocks of life with the completion of the rough draft of the Human Genome Project. The mammoth 13-year enterprise identified and sequenced the human genome—the complete list of genetic material in human cells. Similar projects also recorded the genetic makeup of simpler organisms, including yeast, roundworms, and mice.

But analyzing that information and efforts to catalog and map the genomes of other living organisms are ongoing processes. Scientists and the public alike have high hopes that the research will lead to advances in human health and health care, from the availability of better plant-based foods to cures for disease.

Matteo Pellegrini, a UCLA assistant professor of molecular, cell, and developmental biology since 2005, is putting computer technology to work in this quest, giving other scientists in a wide range of basic biological research areas the tools to significantly expand their genomic research and take it in new directions.

“Our lab develops new approaches to model and interpret large-scale genomic information,” said Pellegrini, winner of a 2007 Research Fellowship Award from the Sloan Foundation. “The work we do bridges the gap between the generation of data and the ability to interpret that information—a gap that is becoming wider as technology is generating more data.”

Traditionally, biologists have tried to understand the genes within organisms with approaches that reveal, one at a time, their genetic components and interactions. Although successful, these approaches have been very time-consuming and produce only a partial view of the organism being studied.

Now, researchers can use high-volume sequencing technology and high-density chemical probes called micro arrays that simultaneously measure thousands of properties of a cell to get a complete view of genetic data in as little as a few hours. The new techniques produce massive quantities of data about DNA, the molecules that encode genetic information.

With the help of students who are funded by his Sloan Fellowship, Pellegrini uses the software he created to search



for relationships between various data sets in order to build molecular networks.

“A large part of our research tries to characterize the ‘epigenetic state’—the factors in DNA that can alter how its transcription machinery reads the genetic information—which then can change how the gene is expressed and cells develop.”

Because Pellegrini doesn’t generate data himself, collaborating with other UCLA researchers has been critical to his work.

“With the new software,” Pellegrini said, “we can take the data of my colleagues and characterize the epigenetic processes of the genetic material in that data in greater detail than was possible even a year or two ago.”

One of those colleagues whose research he helps to analyze is Steve Jacobsen, a professor of molecular, cell, and developmental biology in the College and an investigator in the Howard Hughes Medical Institute, who conducts basic research on plants. Jacobsen is considered a leading authority on DNA methylation, an important process by which chemicals called methyls attach to the DNA, turning off particular genes.

Understanding the pattern of methylation helps scientists to understand the mechanisms that control it, which they expect will eventually give them the ability to manipulate the process.

“Methylation is fundamental to controlling growth and development in both plant and animal cells, and is also important in some cancers,” said Jacobsen. “Cancer cells silence tumor suppressor genes through methylation, and uncontrolled growth results.

“If we can manipulate methylation,” Jacobsen said, “we can manipulate gene expression.”

Through Pellegrini’s computational analysis, Jacobsen said, “We’ve been able to take our research to a whole new level and discover things we never thought about before. Now we’re feeding back into the program and confirming our new discoveries about the mechanisms that control DNA methylation.”

Jacobsen also recently began working with Pellegrini on a project to examine the genomic structure and processes of wild rice, which eventually could lead to better and more nutritious strains of the plant.

Pellegrini also has been working with the laboratories of Arnold Berk, UCLA professor of microbiology, immunology, and molecular genetics, and Siavash Kurdistani, UCLA assistant professor of biological chemistry, to identify all the epigenetic changes induced by cancer causing viruses that transform normal cells into cancer cells.

And, Pellegrini is sharing his knowledge this fall in a new undergraduate course that gives an overview of genomics and bioinformatics. Last year he taught a smaller undergraduate seminar on the same subject.

You could say that Pellegrini’s scientific interests are, well, in his genes. His father, Claudio Pellegrini, is a UCLA professor of physics who researches the physics of particle beams and accelerators. Like his father, the younger Pellegrini received a doctoral degree in physics, but that background propelled him in a different direction.

“My interest in applying computational techniques from physics to biological problems is motivated by my desire to describe organisms in greater detail and then ultimately have the

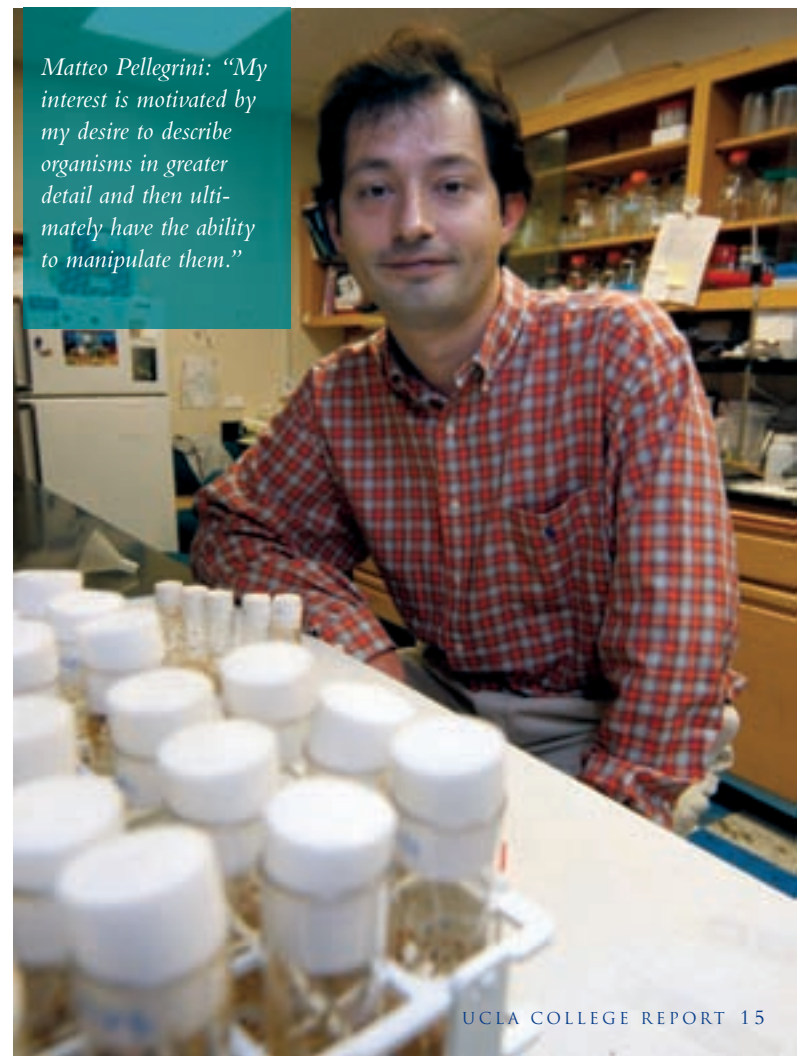
ability to manipulate them,” Pellegrini said.

Utpal Banerjee, professor and chair of the Department of Molecular, Cell and Developmental Biology, said Pellegrini has been a key addition to the department.

“Matteo has filled a gap that no else in the department can fill, because he’s a bio-mathematician who can take data from many different kinds of experiments and interpret them for their significance,” said Banerjee. “He is truly a brilliant scientist. And, it’s not just theoretical modeling but also Matteo’s ability to create the theoretical framework for the proper interpretation of the data that makes him so special.”

Banerjee said this expertise is important for biological research because genomics and large-throughput analyses have made biology one of the most computationally intensive of academic subjects. “Matteo also helps the department enormously in its effort to create bridges with other departments—in the medical school and elsewhere in the college,” Banerjee said. “As someone who has the ability to understand theory and also interpret data properly, he can work with a wide range of people, like those doing stem cell research, as well as those working on plants, to make sense of their research efforts.”

“We’ve been able to take our research to a whole new level and discover things we never thought about before.”



*Matteo Pellegrini: “My interest is motivated by my desire to describe organisms in greater detail and then ultimately have the ability to manipulate them.”*

# Success Stories

Four UCLA students talk about how the university's Academic Advancement Program, the nation's largest student diversity program, supported them in their challenges—and triumphs

## Maria Olivares

Double Major: History; Chicana and Chicano Studies

As a child, Maria Olivares' dream was to one day enroll at a university she saw in a TV program. The reason for her choice was simple: "That was my only exposure to college life," she said.

Growing up in south-central Los Angeles as part of a large family in which high school graduation wasn't the norm, the idea of attending an elite university seemed about as real as a TV sitcom. But Olivares was determined to chart a new course. She became the first in her family to attend college when she enrolled at UCLA as a freshman. But it wouldn't be easy.

"It was such a different environment from my world back home," Olivares said.

She credits AAP with helping her to get through that first year.

"AAP reduces a 30,000-plus student population down to about 300, which enabled me to make connections that really helped me."

As she became more involved with AAP—working as a peer counselor and assisting with outreach to prospective students—Olivares began to realize that her admission to UCLA had not been a fluke, as she had once thought.

"Talking with others about my experience helped me become more aware of everything I was accomplishing," she said. "I started believing in myself."

Now with a double major in history and Chicana and Chicano studies, Olivares hopes to act as a bridge between academia and her community, instilling in her younger brother and her 12 nieces and nephews the importance of higher education and the opportunities it can bring.

"They really look up to me," Olivares said. "They're so deeply affected by my being here and serving as that bridge."



## D'Juan Farmer

Physiological Science

D'Juan Farmer felt prepared for the academic rigors of UCLA. Born and raised in Compton, he had attended a math/science magnet school and was eager to begin studies that would lead to a career in medicine or public health.

But Farmer initially found himself intimidated by his new environment. In chemistry, he struggled to master essential material.

"There were specific questions I didn't feel I could ask in such a large class," Farmer said, "and not having the answers to those questions put up a road block that kept me from going any further."

Fortunately, in AAP Farmer found a place where he could seek assistance.

"AAP supplemented my coursework with tutoring that not only allowed me to ask those types of questions in a more intimate setting, but also helped to develop my study skills and to better prepare me for academic life," he said.

Now a physiological science major, Farmer is thriving thanks to the enrichment provided by AAP. Through the AAP Mentors Program he participated in Research Rookies, which set him up with a faculty investigator.

"As a freshman, I was able to work in a laboratory, learn how to do research, and present my work," Farmer said. "Because I got connected early, I can now have more in-depth experiences."

At the same time that he is benefiting from many of AAP's programs, Farmer is giving back. Through AAP's Vice Provost Initiative for Pre-College Scholars program, he has counseled high school students in underserved areas on opportunities in higher education.

"Thanks to AAP, I feel I have a home here," he said. "It's great to be able to reach out to students from similar backgrounds and let them know they can have a home here as well."



## Sikander Iqbal

### Double Major: Political Science and Psychology

When Sikander Iqbal was accepted into the UC system and asked to choose a campus, he recalled, “I felt like they were saying, ‘Choose the school you want to drop out of.’”

Years spent running with the wrong crowd had taken their toll on Iqbal’s psyche. In his Vallejo neighborhood there were few positive role models; it was all too easy to fall in with a peer group in which drugs and violence were the norm.

Iqbal ultimately decided to change course.

“I just looked around and realized that everyone around me was dying or going to jail,” he said. “I had to pull myself out of that environment.”

Thanks to AAP, Iqbal found a support network unlike any he had known. In AAP he found tutoring, counseling from staff and peers, and connections with a world of resources that led Iqbal to become active in the Student Initiated Access Center, which provides tutoring and mentoring services aimed at helping underprivileged students to fulfill their potential.

Above all, AAP changed Iqbal’s mindset.

“They take you from, ‘Am I going to graduate?’ to ‘How fast am I going to graduate?’ and ‘What graduate program am I going to apply to?’ Iqbal said.

By his senior year, Iqbal was closing in on a dual degree in political science and psychology, with a theater minor, and preparing to apply to graduate programs.

“I want to be part of reversing the brain drain,” he asserts. “When I get my Ph.D., I’m going to a community that really needs me, like the one where I grew up, so that when that new generation of kids comes out to play, someone like me will be outside to help make a difference in their lives.”



## Elvira Rodriguez

### Chicana and Chicano Studies

About the only advantage Elvira Rodriguez had as a child growing up in Riverside was a mother who was determined that through education, her daughter would one day enjoy the financial security she never knew. Left homeless at age 18, Rodriguez’s mother struggled to provide for her two children as a single parent, but never let go of her dream for them.

“She taught me that school was the only means of transforming our economic conditions,” Rodriguez said.


Although Rodriguez always loved school, growing up in poverty presented challenges that her classmates couldn’t understand. In high school, she would have her handwritten essays returned with the instruction that they needed to be typed. Rodriguez didn’t own a computer.

When she got to UCLA, it was the first time she had ventured beyond Riverside. The adjustment was difficult.

“I felt out of place,” Rodriguez said. “I was close to going home.”

AAP changed that. Rodriguez became involved in the Program Leading to Undergraduate Success, and through that program she was told about Undergraduate Research Fellows. Soon Rodriguez had received a scholarship and an opportunity to be paired with a faculty mentor to conduct research.

A member of the McNair Research Scholars Program, Rodriguez was interested in studying the role of education in the lives of low-income students of color. She contacted Daniel Solórzano, a professor in UCLA’s Graduate School of Education and Information Studies; she sat in his graduate research apprenticeship course and he provided guidance. Soon, Rodriguez was doing research of her own, and presenting her results at conferences.

“This program opened up a whole new world for me,” said Rodriguez, now a senior setting her sights on a doctorate in education—to her mom’s delight. 



# New Clues to a Killer's I

Chemists at UCLA and in Italy produce a key advance that may help solve the mystery of Lou Gehrig's Disease.

When Joan Selverstone Valentine first began studying a protein called copper-zinc superoxide dismutase in the 1970s, she was interested in the basic chemical properties of this enzyme. Valentine's laboratory isolated and characterized copper-zinc superoxide dismutase, and she and her colleagues were among the pioneers in replacing the copper and zinc and inserting other metals to see the effects.

Then in 1993, research by others showed that a mutation of the superoxide dismutase plays a role in the devastating and fatal degeneration of nerve cells known as amyotrophic lateral sclerosis (ALS), more commonly called Lou Gehrig's Disease.

Since the link was discovered, Valentine's laboratory has worked toward building a better understanding of the links between the enzyme and ALS; her lab has made more than two-dozen mutant, ALS-causing enzymes, most of which have only one wrong amino acid out of 153, to try to understand their properties and learn what makes them toxic.

"Some of the mutant proteins are very different from the normal protein, but others are virtually identical to the normal protein—yet they all cause the disease," said Valentine, a professor in the Department of Chemistry and Biochemistry. "That was the real mystery. You wrack your brain: What is similar among all these proteins? They seem so different. How can they all cause the same disease?"

Now Valentine and her colleagues, including Ivano Bertini, professor of chemistry at the University of Florence and director of the European Magnetic Resonance Center, think they know. In ALS patients, the protein's copper and zinc may not be there at all.

"If we keep the metals entirely out of the protein, we can explain the toxicity," said Valentine, who was elected to the National Academy of Sciences in 2005 and to the American Academy of Arts and Sciences in 2007. "It was such a puzzle, but this hypothesis can solve it."

If scientists can determine why ALS patients lack the copper and zinc, that would be a major advance that could eventually lead to treatment.

Valentine's UCLA colleagues include: Armando Durazo, a UCLA graduate student of chemistry and biochemistry; Edith Butler Gralla, a senior research chemist at UCLA; and Julian P. Whitelegge, an adjunct professor at the Semel Institute for Neuroscience and Human Behavior at UCLA and UCLA's Brain Research Institute.



Joan Valentine (shown here with doctoral candidate Lindsay Kane): "All of us who work in the field hope our research will lead to a treatment of ALS."

# identity

**“That was the real mystery. You wrack your brain: What is similar among all these proteins? They seem so different. How can they all cause the same disease?”**

Copper-zinc superoxide dismutase, which was discovered in the 1960s, is an enzyme that protects cells from free radicals—the unstable atoms or molecules that can cause cell damage. The link with ALS came when researchers sequenced the genes of people who have the inherited form of ALS and found that some of them have mutations in the gene that codes for this enzyme.

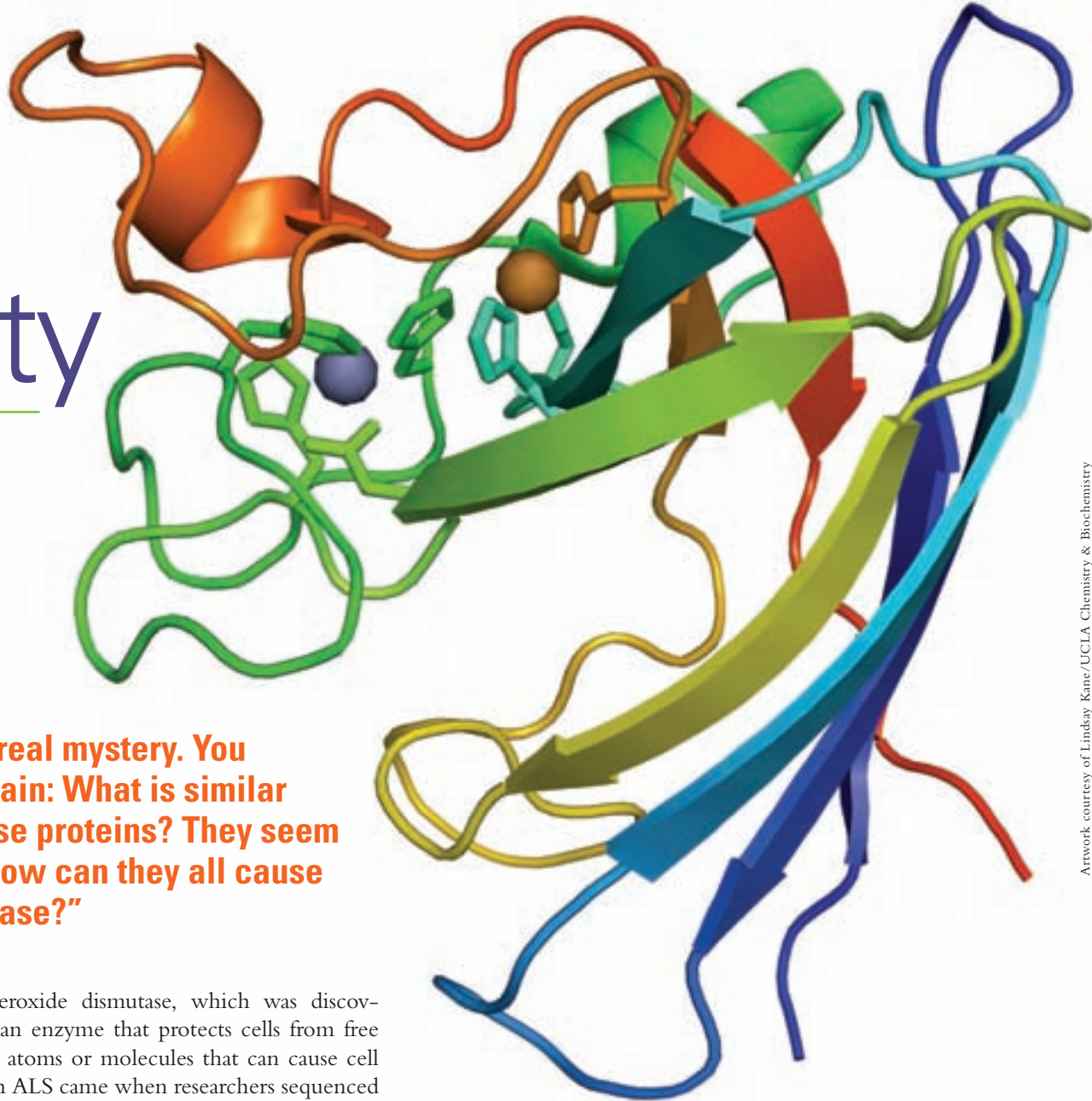
While the inherited form represents only a fraction of all ALS cases, this marked the first time there was an indication of a cause for any form of ALS.

Valentine’s earlier studies show that while normal superoxide dismutase has copper and zinc, scientists can make it with no metals. When it is first produced inside the cell, it has no metals and acquires them later.

Valentine’s current research, which is funded by the National Institutes of Health, indicates it is the metal-free protein that is likely to be toxic. When the copper and zinc are not present, the protein misfolds.

There is evidence that ALS is associated with this misfolding of the protein, which becomes toxic in some way that is not known and has properties similar to misfolded proteins associated with other neurodegenerative disorders like Alzheimer’s and Parkinson’s diseases.

Is there a way to slow down this process to give the cell more time to eliminate the misfolded proteins in all of



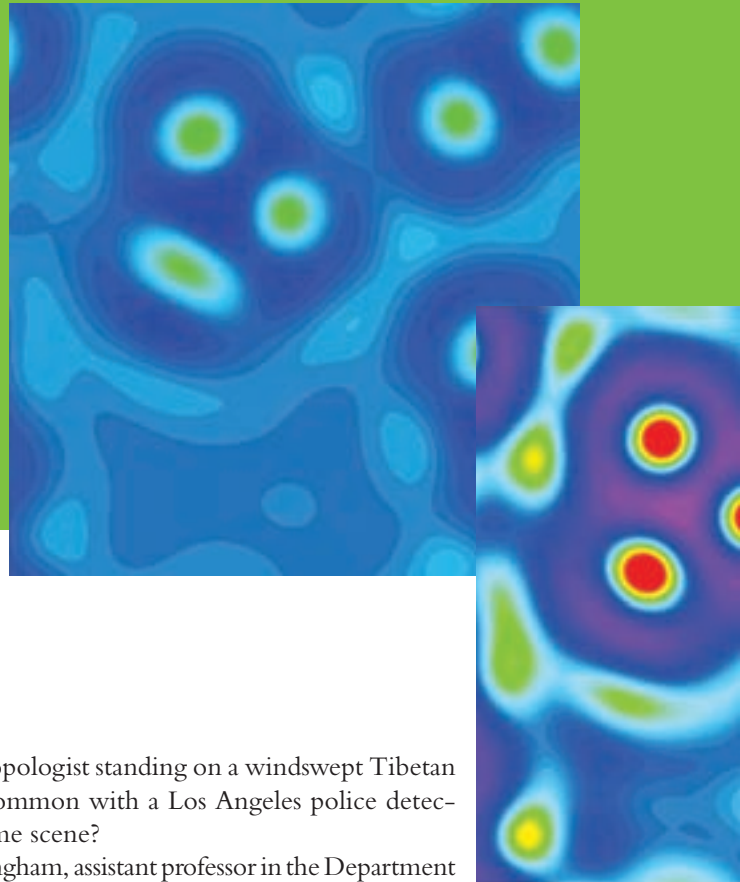
*The structure of a subunit in a protein studied by Joan Selverstone Valentine that plays a key role in a form of Lou Gehrig’s Disease. The orange and blue spheres represent copper and zinc ions, which bind to the protein and stabilize it. Valentine and her colleagues from Italy believe the toxic form of the protein lacks these metal ions.*

these diseases? Would a strategy to reduce or prevent protein misfolding work against these and other diseases? These are avenues for further investigation by researchers.

“When we made the mutant proteins, each one seemed to be totally different,” she said. “Some of the mutant proteins that cause the disease are identical to the normal protein in every property we measure.

“All of us who work in the field hope our research will lead to a treatment of ALS,” Valentine said. “What we really want is to diagnose and prevent ALS before its onset. We’re still a long way from that, but we’re making progress.”

# Finding Patterns in Crime



An anthropologist joins forces with mathematicians and local police departments to bring innovative new techniques to the study of crime.

By Aaron Dalton

What does an anthropologist standing on a windswept Tibetan plateau have in common with a Los Angeles police detective investigating a crime scene?

To P. Jeffrey Brantingham, assistant professor in the Department of Anthropology in the College, the two scenarios have quite a bit in common. When he is not teaching undergraduates, he still does fieldwork on the prehistoric hunter-gatherers who once roamed the steppes of Tibet.

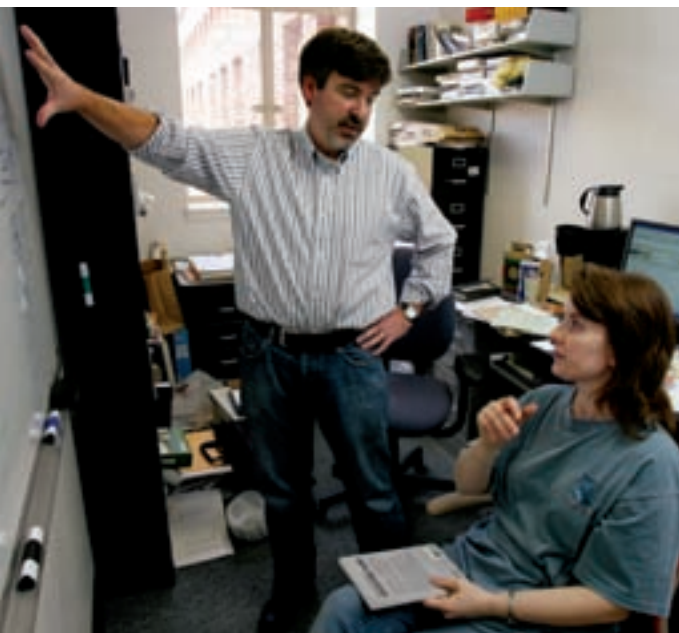
But to Brantingham, crime and its many patterns are a type of contemporary archaeology. Researchers dig up sites and find buildings, tools and food remains. They must deduce the behavior that led to those remains. Similarly, a policeman shows up at a crime scene and has fragmentary or uncertain information about the time the crime occurred and perhaps some physical evidence such as fingerprints, bloodstains or fibers.

“The process underlying crime analysis is like an archaeological process, starting with a fragmentary record and trying to infer behavior that led to a pattern,” said Brantingham.

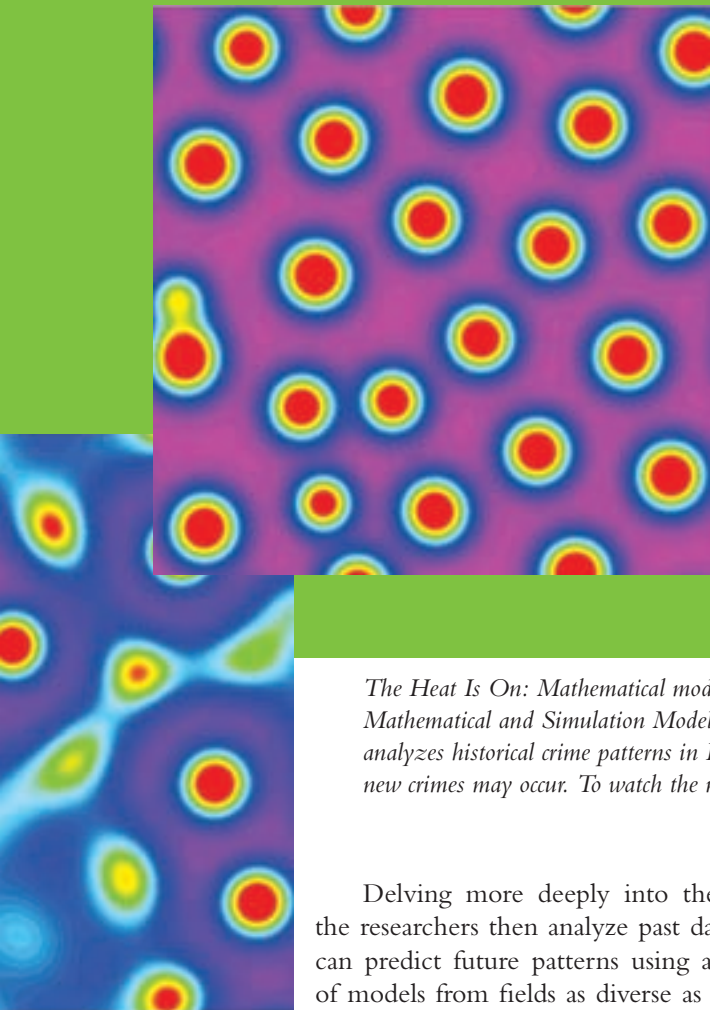
All of which explains why Brantingham has partnered with two UCLA colleagues in the Department of Mathematics—Andrea Bertozzi and Professor Lincoln Chayes—and Southern California police departments to bring new and novel techniques from mathematics to the study of crime. With the assistance of George E. Tita, a criminologist at UC Irvine, the team began the UC Mathematical and Simulation Modeling of Crime Project in 2004.

Brantingham and his fellow UCLA researchers began with a theory that suggests that the formation of short-term crime patterns are the result of random interactions that play out among three types of individuals—offenders, victims and law-enforcement officers—performing everyday activities and moving through their routines.

Most people follow fairly predictable routes and patterns in their daily lives; people go from home to work, work to home, and generally visit the same restaurants, malls, gas stations and gyms. Extending those patterns to the study of crime, “the concept is that offenders, victims and law enforcers move and mix in relatively simple ways that can be described mathematically, and out of that interaction, crime patterns emerge.”



Jeff Brantingham with Virginia Pasour, a postdoctoral fellow in the Department of Mathematics and a collaborator on the UC Mathematical and Simulation Modeling of Crime Project.



“The concept is that offenders, victims and law enforcers move and mix in relatively simple ways that can be described mathematically, and out of that mix, crime patterns emerge.”

*The Heat Is On: Mathematical models (left and above) produce graphic ‘heat maps’ of burglaries over time. The UC Mathematical and Simulation Modeling of Crime Project, directed by anthropologist Jeffrey Brantingham and his colleagues, analyzes historical crime patterns in Los Angeles and Long Beach neighborhoods, with a goal of predicting where and when new crimes may occur. To watch the models evolve in real time, visit Brantingham’s Web site at <http://paleo.sscnet.ucla.edu>.*

Delving more deeply into the idea, the researchers then analyze past data and can predict future patterns using a series of models from fields as diverse as chemistry, biology and microscale physics that

describe mixing patterns.

But one could naturally ask: don’t individual actions play a role in crime?

Brantingham’s model is actually a reflection of general human behavior. The model does not view criminal behavior as deviant, but rather as a predictable consequence of a certain percentage of normal interactions between an unlocked door and a would-be burglar.

To anyone who recoils instinctively at the notion that we are all just criminals-in-waiting, Brantingham the archaeologist cites the millions of years of human evolution during which foraging and hunter-gatherer behavior were the basic means of survival. What is foraging other than moving through a landscape and picking up items that seem useful or valuable?

Brantingham believes that the distance between Los Angeles car thieves and Paleolithic foragers is a relatively short, straight line. It’s one reason he’s optimistic that the very models he develops to predict crime patterns in modern Los Angeles will also prove useful in analyzing the distribution of Tibetan archaeological sites.

Of course, opportunities alone do not make crimes; most people bypass numerous opportunities every day. We notice an open window and don’t consider breaking in; we help the elderly lady across the street without even considering running off with her purse. The opportunities alone do not *explain* the crime, but without the opportunities—the meeting of a potential victim and a would-be aggressor in the absence of law enforcement—the crimes could not take place.


How does all of this apply to the real world? Why are police departments in Los Angeles and Long Beach cooperating with Brantingham and his team, opening their records and giving the team data with which to test their models?

As populations grow and cities expand geographically, the police face ever-greater challenges of allocating their manpower to prevent crime. To the extent that Brantingham’s models can predict where future crimes are likely to occur over time based on a study of historical data, police will be able to allocate their resources more efficiently to stop that crime from occurring. Essentially, the police will change the dynamic of interactions by inserting additional manpower into the equation.

It sounds good in theory, but will it work in practice? Brantingham said that there is already plenty of evidence that Situational Crime Prevention (SCP) can reduce crime by altering the environment in which crime occurs. SCP can include more police in a certain area, but it can also mean improving street lighting, adding video surveillance cameras—or just getting more pedestrians on the streets.

“In China, urban street crime is growing, but it’s less of a problem than in U.S. urban environments simply because in China so many people sit outside and watch everything that is going on,” said Brantingham. “All those watchers alter the dynamic by removing opportunities to commit crime unnoticed.”

With support from the National Science Foundation and the College of Letters and Science, Brantingham and his team continue to delve into the dynamics of how and why crime patterns cluster in time and space in the ways that they do.

“I don’t want to promise a crime-fighting silver bullet,” Brantingham said, “but I’m cautiously optimistic that the models we create will give police advance notice of where to put patrols on the ground.” 

# Building Bridges Between

# Cultures and Colleagues

By Robin Heffler

While growing up in the San Fernando Valley in the 1960s and '70s, Rafael Pérez-Torres keenly felt his bicultural background. His father was an immigrant from Oaxaca, Mexico. His mother, born of Mexican parents, was a Los Angeles native.

“The tension between our American and our Mexican selves was always present,” said Pérez-Torres, a UCLA professor of American literature since 1998 and the recently appointed chair of the Department of English in the College. “I had friends from many different ethnicities dealing with similar struggles of belonging and yet not belonging. As something we had to face daily, it was a given part of our experience.”

But Pérez-Torres could no longer ignore the dual identity after accepting a faculty position at the University of Wisconsin. Though trained in narrative theory, he was asked to teach ethnic literature.

“It made me face that tension in my background and gave me an opportunity to learn more about Chicano literature, which I was anxious to explore,” said Pérez-Torres. “The more I studied, the more interested I became in acquiring a poetic and critical vocabulary to explain my own experiences.”

That research yielded a widely lauded book, *Movements in Chicano Poetry—Against Myths, Against Margins* and earned Pérez-Torres a reputation as a leader among scholars of Chicana and Chicano literature. The book addresses key issues of Chicano identity, especially focusing on the contributions of women writers and thinkers as Chicanos began to assert their role in shaping American society.

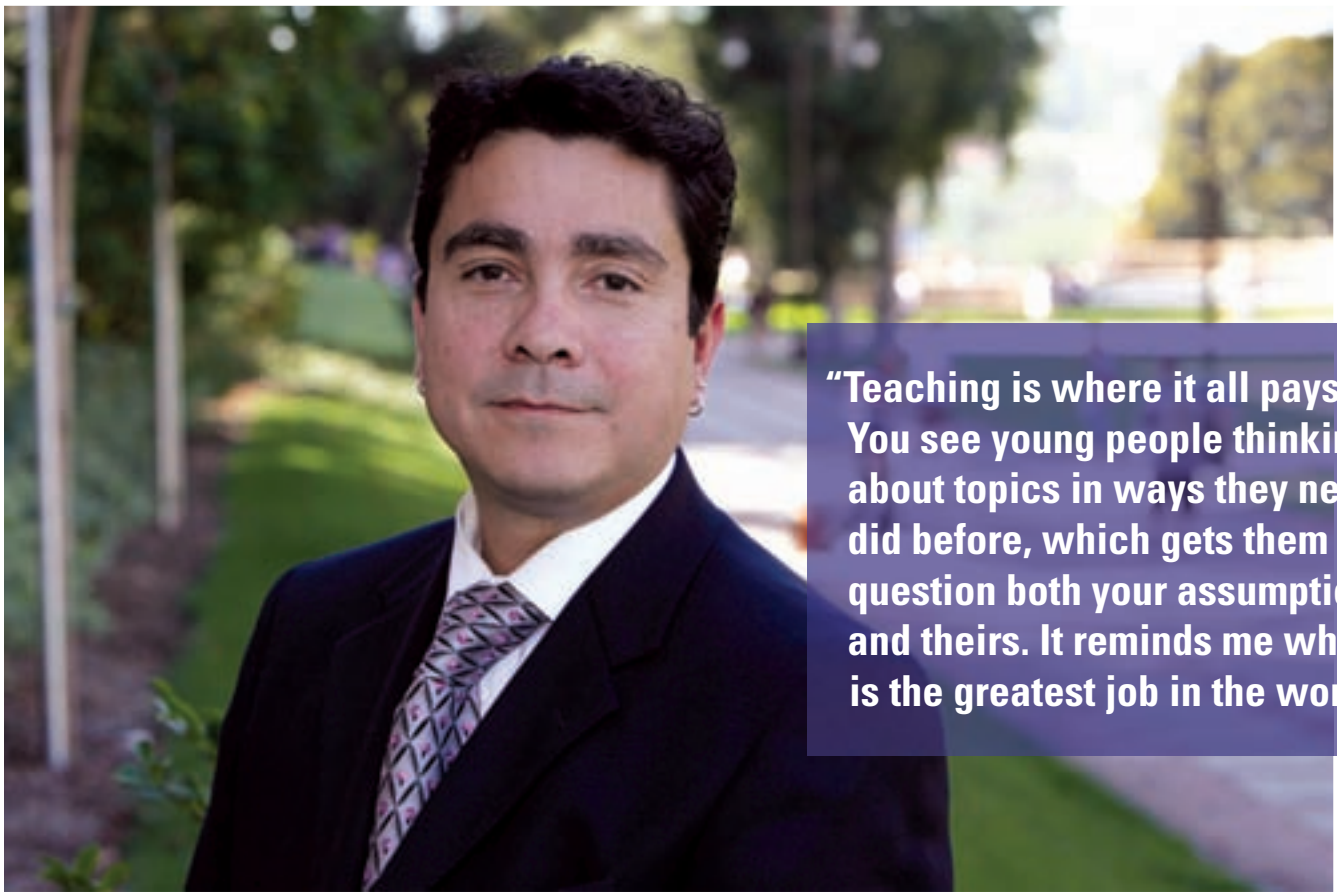
Beginning in the 1980s, Pérez-Torres observed, “Chicana feminist voices questioned the idea of a unified ethnic identity or a unified gender voice, and began to talk about the multiplicity of what it means to be an American as well as a Chicana. Some connected with white middle-class feminists through gender politics, at the same time recognizing distinctions of class, ethnicity, race, and even language.”

He also was drawn to writers like Toni Morrison, who used postmodern literary techniques that emerged after World War II to focus on the social ramifications of artistic representation. His 1997 essay on Morrison’s novel, *Beloved*, has received much critical attention, and demonstrates how the novel broadens an understanding of just what constitutes the often elusive concept of postmodernism.

Pérez-Torres’ most recent book, *Mestizaje: Critical Uses of Race in Chicano*

Rafael Pérez-Torres, the newly-appointed chair of the Department of English, finds focus in his research and teaching by exploring commonalities between people—even while recognizing their differences.





**“Teaching is where it all pays off. You see young people thinking about topics in ways they never did before, which gets them to question both your assumptions and theirs. It reminds me why this is the greatest job in the world.”**

*Rafael Pérez-Torres: “Understanding how people form racial or ethnic identities allows for new kinds of communications and connections that cross differences.”*

*Culture*, examines the double-edged sword of racial mixing in Chicano culture—a mixing that both celebrates the blending of races and remarks on the violent legacy of colonization that gave birth to it.

“The focus on race in Chicano Studies is becoming more prevalent,” he said. “Because it involves multiple identities, racial mixing allows for new possibilities in understanding shared social and political concerns.

“For example, writer Cherrie Moraga talks about the connections between people of different indigenous descents. She sees the struggles of particular indigenous communities, for example in Ecuador, as part of larger social and political struggles across the hemisphere—including struggles in the United States.”

Pérez-Torres is most interested in understanding commonalities between people, even while recognizing their differences.

“Understanding how people form racial or ethnic identities allows for new kinds of communications and connections that cross differences,” he said. “I take exception with people who talk about ethnic studies as celebrating self identity. I think it is really about questioning how the self is constructed and how new, broader communities can be created.”

Dean of Humanities Tim Stowell, who appointed Pérez-Torres as chair of the English department, sees him as creating connections between faculty in the department as well.

“Rafael is great at listening to people and seeing common ground in different points of view,” said Stowell. “He respects the traditions of literary studies and at the same time is a pioneer in the study of new genres in American society and culture.”

For his part, Pérez-Torres said, “I want to continue the department’s high level of scholarship and its excellent job placement of graduate students, while increasing the hiring of talented young scholars.” He also wants to create “more of a shared intellectual community in the department, which, with more than 1,400 majors and over 55 faculty members, can be complicated. And, L.A. itself is designed as a collection of disparate communities. So cohesion is a challenge.”

Stowell noted that already Pérez-Torres has successfully reached out to students in the classroom, encouraging extensive student discussions and exchanges of views.

“Teaching is where it all pays off, where all the hours of reading and thinking and studying come alive,” said Pérez-Torres, who has taught undergraduate courses on Chicano literature, American literature, and an interdisciplinary course on interracial dynamics, as well as graduate seminars on Chicano poetry, post-modernism, and the ethnic novel.

“In exchanging ideas, you see young people thinking about topics in ways they never did before, which gets them to question both your assumptions and theirs,” he said. “It reminds me why this is the greatest job in the world.”

# Undergraduates at the Forefront of DISCOVERY



A record number of students participate as authors of research on the fruit fly that becomes a major genetics study.

One of the articles published in the October 19 issue of the scientific journal *Genetics* is particularly noteworthy, not merely for the research that is reported, but for the people doing the work and the scope of the effort.

The significance of the study on the gene of a fruit fly is considerable; the large number of researchers even more so: of the signed authors involved in the study, almost all of them—a total of 264—were UCLA undergraduates at the time they conducted the research. Of the students involved, most were freshmen and sophomores.

“To the best of our knowledge, there is no other major peer-reviewed paper that has ever had this many undergraduate authors,” said Utpal Banerjee, chair of the Department of Molecular, Cell and Developmental Biology.

The students participated in the Research Training in Genes, Genetics, and Genomics class (Life Sciences 10H), established through a \$1 million grant awarded to Banerjee by the Howard Hughes Medical Institute to develop discovery-based undergraduate education. With the funding, Banerjee started a course that provides a meaningful research experience to students at the outset of their academic careers, along with the opportunity to continue their work in a series of follow-up courses in which they can become part of a longer-term research project.

*Undergraduate student Jing Wen Tan studies samples for the group research project in Life Sciences 10H, “Research Training in Genes, Genetics, and Genomics.”*

“This program is bringing the type of research that used to be experienced only at the graduate level to undergraduates who have just arrived at UCLA.”



The *Genetics* paper represents the combined work of students who were enrolled at some point during the first four years of the program, which is now in its sixth year and has moved on to a new, similarly ambitious project. All of the students who participated in the research are part of the Undergraduate Research Consortium in Functional Genomics.

Each student in the course was given the task of characterizing 10 different lethal mutations in the eye development of the *Drosophila* (fruit fly) toward the larger goal of determining the function of the model system's entire genome. This labor-intensive research is ideally suited for large-group study, as well as providing the undergraduate students with an opportunity to see their experiments through from start to finish.

"It's not like we were building a large pyramid and each student was merely adding one stone," said Banerjee. "At the end of the quarter, students generated their own paper with results and analysis of the 10 mutations they studied."

Students enter the class with little research know-how but brimming with enthusiasm, says John M. Olson, Ph.D., instructor for the course.

"We can't teach them all of the concepts on day one, so they start doing work in the lab before they necessarily understand what it is they're doing or why they're doing it," Olson said. "But by the middle of the quarter they put it all together and by the end of the quarter they are having deep conversations about the project."

The final product is a boon for scientists—a complete database describing the genome-wide function of all known lethal mutations in the *Drosophila*. For approximately two-thirds of human genes known to be involved in disease, there is a similar version in the fruit fly.

"By characterizing these genes, we can improve our understanding of human biology," Olson explained.

The most intriguing observations from the genome-wide screening can now be built on by other scientists, including the undergraduate students who go on to the advanced courses. But even more important than the data generated by the project is the new model for undergraduate education at a major research university.

"The tradition in science has been that for the first four years you study the textbooks and, at most, take part in a few laboratory exercises to demonstrate the concepts," said Olson. "This program is bringing the type of research that used to be experienced only at the graduate level to undergraduates who have just arrived at UCLA."

Kevin Yackle enrolled in the second quarter of his freshman year, and was quickly taken by the idea that he was contributing data that had never before been known.

"The faculty set the bar high, and the students respond and work hard to meet these standards," said Yackle. By the end of his first year in college, he noted, "I had not even begun to take my lower-division biology classes and I was not only reading primary literature about signal transduction, development, and cancer, but I was presenting papers to the class!" Yackle is currently enrolled in an M.D./Ph.D. program.




*Undergraduate Emil Kohan at a genetics workstation in Life Sciences 10H.*

"There is no reason students can't get involved in research from the beginning, before they have taken all of the scientific coursework," said Banerjee. "They can learn the didactic material at the same time that they're experiencing science in the lab."

It's a model of education that appeals to students like Tony Hung, a senior currently applying to medical schools.

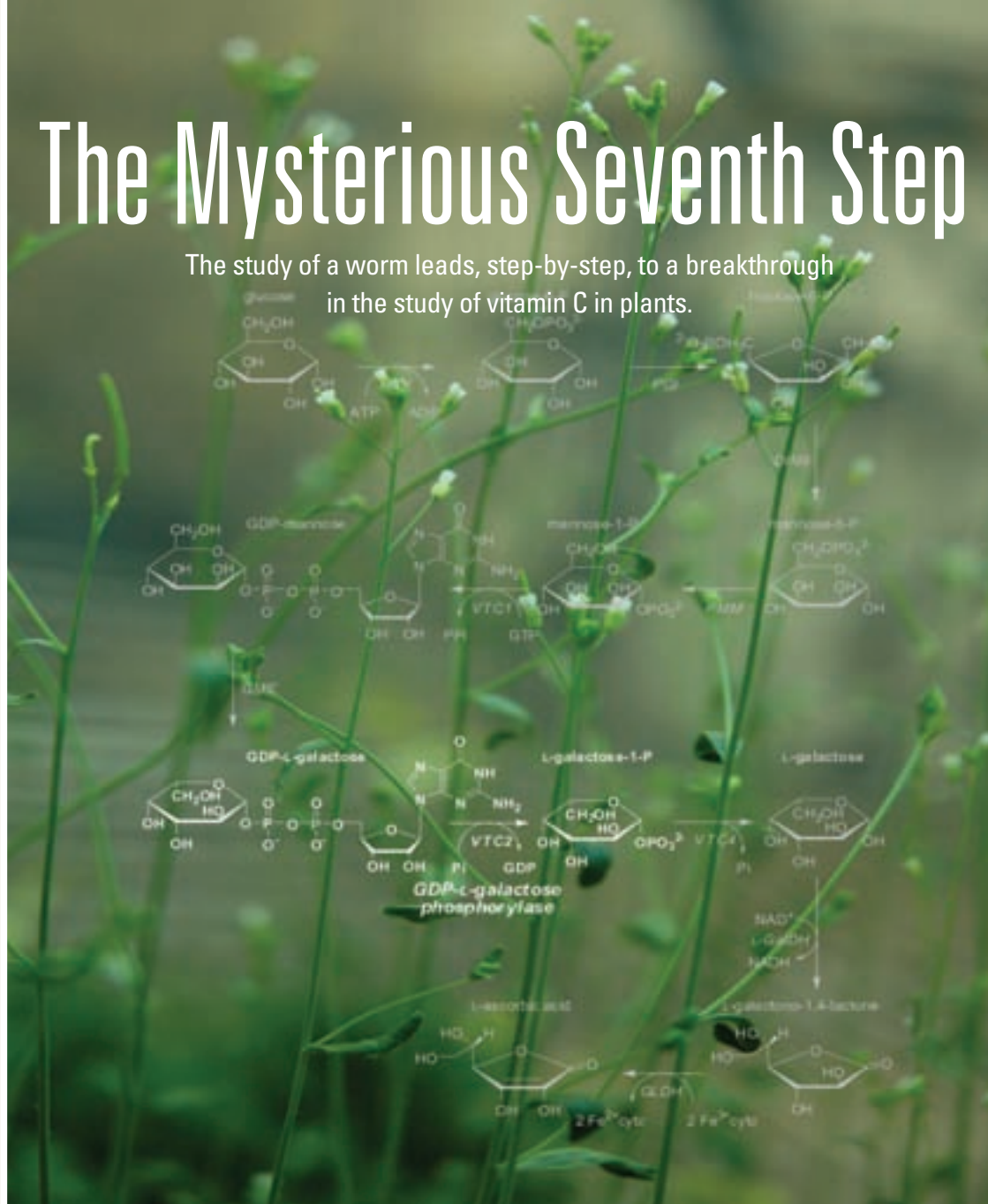
"I was trained not only to master laboratory techniques, but to question and think like a scientist," said Hung, who was so taken by the opportunity to be involved in cutting-edge science as he went through the program that he often logged 25 hours a week in the lab. Kathy Ngo also credits the program with building her passion for research. "It's a discovery-based education that combines the didactic component employed in traditional classrooms with work at the bench," Ngo said. "The excitement of obtaining and interpreting results through the use of functional genomics tools has taught me to love and appreciate science."

The students who come out of LS10H are highly sought after by other research labs on campus, Banerjee said. Many cite the experience as having set them on the trajectory toward a scientific career.

"This program paved the way to my future," said Joy Wu, who participated in LS10H as a sophomore in the spring of 2003, continued in the advanced courses for the following two years, and is now in her third year in Stanford's Neurosciences Ph.D. program. "The opportunities for both novel research and personal development were beyond what anyone could have expected. I know that my experiences changed the course of my future for the better." 

# The Mysterious Seventh Step

The study of a worm leads, step-by-step, to a breakthrough in the study of vitamin C in plants.



By Stuart Wolpert

When life on Earth first began to evolve, the planet was almost devoid of oxygen. A byproduct of plant growth, oxygen is essential for breathing by some organisms—and a deadly poison to others. To survive the onslaught of oxygen, plants developed mechanisms to protect themselves from its ravaging effects.

“Two billion years ago, plants devised an efficient way to get sunlight to make sugar from carbon dioxide that produced oxygen as a waste product; that waste product probably killed off most of all living species at that time,” said Steven Clarke, director of the UCLA Molecular Biology Institute.

“The organisms that survived developed defenses against oxygen, and one of the best defenses is vitamin C,” Clarke said. “Plants learned how to make vitamin C to protect themselves.”

An essential nutrient for humans, vitamin C is also an

important antioxidant for animals and plants. Humans do not have the ability to make vitamin C; they obtain it from dietary sources, especially fruits and plants.

It was not until 1998 that a theory was developed to explain the biosynthetic pathway that plants use to make this compound. Research confirmed much of the pathway, although one crucial missing link continued to baffle scientists and remained unknown—a mystery that was revealed in research findings published this year by a team in Clarke’s laboratory working with colleagues at Dartmouth.

As a result, the researchers have identified a crucial enzyme in plant vitamin C synthesis that could lead to enhanced crops—a discovery that now makes clear the entire 10-step process by which plants convert glucose into vitamin C.

Carole Linster, a UCLA postdoctoral fellow and lead

author of the study, discovered the controlling enzyme, GDP-L-galactose phosphorylase, which serves as the pathway that plants use to manufacture vitamin C.

“If we can find ways to enhance the activity of this enzyme, it may be possible to engineer plants to make more vitamin C and produce better crops,” said Linster.

Said Clarke, “We hit on gold, because we now have a chance to improve human nutrition and to increase the resistance of plants to stress from oxygen. Plants may grow better with more vitamin C, especially with more ozone in the atmosphere due to pollution.”

To Clarke, whose primary field is the biochemistry of aging, the finding about vitamin C in plants is an example of a pathway to discovery with many milestones.

The first step began with the study of a gene in a tiny roundworm used as a model for aging studies—work conducted by Tara Gomez, a former UCLA undergraduate in Clarke’s laboratory and now a graduate student at the Caltech.

The gene’s sequence suggested that it was related to a family of genes altered in cancer, known as HIT genes. These genes are studied in the laboratory of Charles Brenner at the Norris Cotton Cancer Center at the Dartmouth Medical School.

Collaboration between the groups directed by Clarke and Brenner revealed a similarity between the worm gene and the product of a gene in a small roadside plant named *Arabidopsis thaliana*, which is widely used as a model for studying the genetics of plants. Mutations in this gene had been previously linked to low levels of vitamin C.

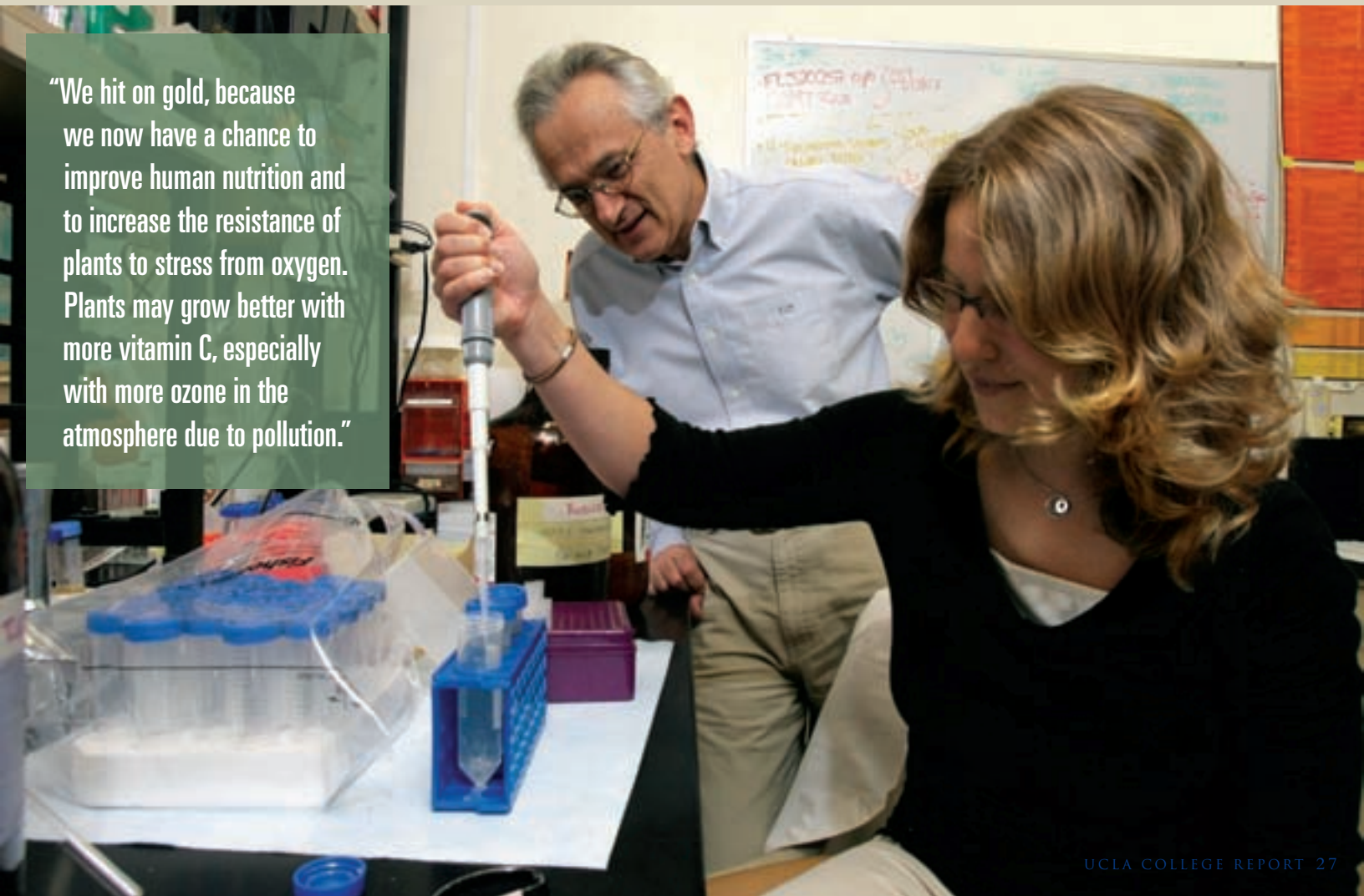
Linster and Gomez were able to purify the plant enzyme from bacteria. The team, led by Linster, produced the GDP-L-galactose substrate and reconstituted in test tubes the mysterious seventh step in vitamin C synthesis. Others participating in the work included UCLA biochemistry graduate student Lital Adler and Princeton undergraduate Brian Young.

The research was federally funded by the National Institute on Aging, the National Institute of General Medical Sciences, the National Science Foundation, and the National Cancer Institute, and by a fellowship Linster received from the government of Luxembourg.

“Our finding leads to attractive approaches for increasing the vitamin C content in plants,” Linster said. “We now have two strategies to provide enhanced protection against damage from oxygen: stimulate the activity of the enzyme or engineer plants which overexpress the gene that encodes the enzyme.”<sup>CR</sup>

[www.mbi.ucla.edu](http://www.mbi.ucla.edu)

“We hit on gold, because we now have a chance to improve human nutrition and to increase the resistance of plants to stress from oxygen. Plants may grow better with more vitamin C, especially with more ozone in the atmosphere due to pollution.”



## A Legacy of Dedication

A renowned UCLA economic historian has endowed a chair through his estate that provides permanent support for his field.

In May of this year, UCLA's Department of Economics lost one of its finest faculty members when Professor Kenneth Sokoloff succumbed to complications from liver cancer. But Sokoloff's dedication to research and teaching at UCLA did not end with his death. A month later, the department received a gift of \$1 million from his estate to establish the Kenneth L. Sokoloff Endowed Chair in Economic History.

One of the world's foremost experts in economic history, Sokoloff joined the UCLA faculty in 1980. He was the department's first economic historian, but he was soon joined by others. Committed to building a distinguished group of economic historians at UCLA, Sokoloff was instrumental in bringing eminent scholars Jean Laurent Rosenthal and Naomi Lamoreaux to the campus.

Sokoloff's research focused on the impact of the patent system on American economic growth, and examined the comparative economic history of Latin America and the United States. In recognition for his groundbreaking work, he was named a Research Associate of the National Bureau of Economic Research and a Fellow of the American Academy of Arts and Sciences. Sokoloff also served as a visiting faculty member at numerous prestigious institutions, among them Oxford, Caltech, Stanford, and Tel Aviv University.

"Ken was really good at getting things out of data that others thought were too problematic," said Lamoreaux. "I think of that as alchemy—taking base material and turning it into something truly valuable."

Sokoloff was also a devoted teacher. Lamoreaux said, "He conveyed important ideas very well, and he connected with students on a personal level. He was very generous with his time with students." Many former students and colleagues maintained contact with him, and some became good friends.

"Ken didn't have a family of his own," said Lamoreaux, "but he had lots of friends, and friends were his substitute family. Everywhere he went, he was always seeing an old friend."

Sokoloff stressed the interdisciplinary nature of economic history, building bridges to faculty members in other UCLA schools and departments—law, history, political science, sociology—whose work related to economics.


"He was always building this group, helping to get people hired in other departments who had interests related to economic history," Lamoreaux said. These successful collaborations led to the establishment of the UCLA Center for Economic History in 2006.

It was his drive to strengthen the economic history faculty and program at UCLA that led to Sokoloff's decision to create the endowed chair.

"Ken told me," said Lamoreaux, "that he had devoted his career to building economic history at UCLA, and he wanted to make a gift that would preserve that."

The department has gone through some changes in recent years that could potentially have threatened the strength of the economic history program. The departure of Rosenthal from the campus and the death of Sokoloff were major blows. But new faculty have been recruited, and the group remains strong. Now the creation of the Sokoloff Chair will ensure the future of economic history at UCLA.

Lamoreaux explained, "The economic history core has been three people for a long time, and there are still three people. But the Kenneth Sokoloff Endowed Chair will give us a fourth, which is really incredible. Because of the chair, we will be able to attract a very prominent fourth senior faculty member to UCLA."

Gary Hansen, chair of the economics department, said, "Ken Sokoloff was a distinguished economic historian, and his commitment to UCLA and the Department of Economics were as impressive as his scholarly achievements. The chair that he endowed ensures that UCLA's strength and reputation in this important area will survive long after his passing." 

*"Ken Sokoloff didn't have a family of his own," said colleague Naomi Lamoreaux, "but he had lots of friends. Everywhere he went, he was always seeing an old friend."*



# An Investment for Impact

A graduate of the Department of Mathematics becomes the youngest donor ever to endow a chair in the College.

When alumna Sierra Chen decided earlier this year to establish the Sierra Chen Endowed Chair in Mathematics at UCLA with a gift of \$1 million, she became, at 38, the youngest donor in the history of the College of Letters and Science to create an endowed chair.

A native of Taiwan, Chen came to the United States in 1983 to complete her education, and she decided to stay. An avid student of science and math throughout her life, she earned a bachelor's degree in mathematics at California State University, Fullerton, in 1991 and then entered the master's program in math at UCLA.

"I chose UCLA because it has such a good reputation in research and academics," she said. "I was really impressed by the program. All of my professors were excellent."

Chen finished her M.A. in just four quarters. She had hoped to pursue a Ph.D., but her family's Orange County import business, Sowind Corporation, needed her, and she took over the company presidency from her father after graduating from UCLA in 1993. Nine years later she founded a business of her own, MLI-Laser Inc., a residential and commercial design company specializing in cutting and engraving materials such as acrylic, wood, stone, metal, and glass.

Somehow, in spite of her busy work schedule, Chen found time to teach math part-time for six years at Irvine Valley College and Saddleback College.

"I found teaching to be very rewarding," she said. Last year, though, she stopped teaching in order to devote more time to her businesses, which require her to travel extensively.

Chen's graduate education has served her well in her multifaceted career.

"My UCLA education gave me an excellent foundation," she said, "and my master's degree enabled me to teach at the community colleges."

From her own teaching experience she learned that a first-rate faculty is critical to a school's ability to provide high-quality education. Now she hopes that the Sierra Chen Endowed Chair will help advance research and teaching in UCLA's Department of Mathematics by enabling the department to continue to attract and retain top faculty members.

"I know that a good education is very important," she said. "Top professors can encourage their students to go into teaching, or to pursue their own passions."

Christoph Thiele, chair of the Department of Mathematics, is pleased and enthusiastic about the new Sierra Chen Endowed Chair.




Sierra Chen: "Top professors can encourage their students to go into teaching, or to pursue their own passions."

"This endowed chair comes at an exciting time for the department," he said, "as we are in the midst of a stepped-up hiring campaign to offset losses caused by the retirement of longtime faculty."

"Our increased visibility in recent years—including our first Fields medalist in 2006, and our 2007 AMS Award for an Exemplary Program or Achievement in a Mathematics Department—allows us to compete with the finest private and public institutions for the most innovative minds in mathematics."

"Sierra Chen's gift is a real boost for us. It is especially gratifying that a math alumna and successful entrepreneur has chosen to make a significant investment in UCLA's Department of Mathematics because she believes in our future."

Chen said it feels good to know that her gift will have a positive impact on the department. She hopes other young donors will step forward to support the College at whatever level they can.

"Follow your bliss," she advises them. "Do what you believe in. It is a joy." 

"It is gratifying that a math alumna and successful entrepreneur has chosen to make a significant investment in UCLA's Mathematics Department because she believes in our future."

# Paying back “A Golden Institution”

A long-time scholar and her husband endow a chair in women’s studies with a gift of \$1 million.



**Penny and Ed Kanner:** “It’s fascinating to be in a very new graduate major,” said Peggy. “It’s expanding all the time. That’s why I’d like to continue to support it.”

**D**r. S. Barbara “Penny” Kanner has worn many hats in her diverse career. She has been a student, a high school teacher, an author, a wife, mother, and grandmother, a university professor, a noted historian, and a research scholar in women’s studies.

She has also been a generous donor to the College of Letters and Science.

During more than 40 years of association with UCLA, Penny and her husband Ed have established three graduate student awards in the Center for the Study of Women, a graduate fellowship in the William Andrews Clark Memorial Library, an award in the history department for the best graduate paper, and a lecture series in the Center for Modern and Contemporary Studies. Recently, they created the Penny Kanner Endowed Chair in Women’s Studies with a gift of \$1 million.

The Kanners met while they were students at Baruch College in New York, and married in 1944. Later, Ed’s work in the electrical industry brought them to the West Coast.

When their three children were small, Penny worked as a substitute teacher in Los Angeles high schools, but soon

decided to pursue advanced degrees. She earned a master’s degree in history at UCLA, then completed her Ph.D. in 1972. She chose UCLA because “I knew if I decided to pursue a career, I should come from a well-known place with fine faculty and libraries.”

Kanner’s early research focused on British history, but in the 1980s, she turned to the emerging field of women’s studies.

In recent years Kanner has served as a research scholar in women’s studies at UCLA. In 1997 she published her third book, *Women in Context: Two Hundred Years of British Women Autobiographers, a Reference Guide and Reader*. She has taught at UCLA Extension, Mount St. Mary’s College, and Occidental College, and has held a faculty appointment at UCLA. She also served as president of several organizations, including the Western Association of Women Historians and the Research Society for Victorian Periodicals.

“It’s fascinating to be in a new graduate major,” said Kanner. “It’s expanding all the time. That’s why I’d like to continue to support it. The Center for the Study of Women, under the fine directorship of Kathleen McHugh, has been one of the prime impetuses for my work.”

“Penny has always been generous to women’s studies students with her time and talents, as well as with awards that encourage research,” said Christine Littleton, chair of the women’s studies program. “But she has always insisted that those awards carry the names of other women to celebrate their accomplishments. Finally we will be able to celebrate Penny’s contributions in her own name.”

Explaining the Kanners’ decision to create the Penny Kanner Endowed Chair in Women’s Studies, Penny said, “With the reputation of the university and the endowment of the chair, I think we’ll have more competition for leadership.”

“You have to make a decision in your life about what you want to do with your money. If you feel that you have provided well for your children, and you’re comfortable enough, and you want to pay back a golden institution like UCLA, you decide that a big chunk of your estate will go there.

“I believe in paying back. I feel I owe UCLA a very big part of my life. I think people should pay back and help others to make UCLA as great as it can be.”

“With the reputation of the university and the endowment of the chair, I think we’ll have more competition for leadership.”



# An Alumnus Honors His Professor

Donald M. Eversoll, '68, and his wife Mary are establishing the Peter Reill Endowed Chair in European History in the College of Letters and Science.

A bicoastal Bruin with homes in New York and Santa Barbara, Don Eversoll was born and raised in Los Angeles, graduated from Los Angeles High School (following in the footsteps of his father and uncle), and earned a B.A. in history at UCLA.

Asked why he chose to attend UCLA instead of another university, Eversoll quickly responded, "The tuition! I went to LA City College at \$6.50 a semester, and then I was fortunate enough to be able to transfer to UCLA." While at UCLA, he worked at an all-night supermarket in Hollywood to pay for his education.

Eversoll enjoyed his history classes and decided to major in it.

"History gives us a wonderful perspective about ourselves, about where we are and who we are," he said. "My grandchildren tell me with great frequency that it was an easy decision because there wasn't much history back then, so I didn't have to learn much!"

After graduation, Eversoll took a job with Kaufman and Broad real estate developers in New York and quickly became prominent in the field. When the company decided to close its offices in that state, he and friend Peter Klein started their own residential home building business. Eversoll was 30 years old.

"I couldn't afford to retire...or I couldn't afford to retire well," he said, laughing. "So I started my own business." He and Klein sold their company to Pulte Homes in 2002. Currently Eversoll is president of Eversoll Associates, LLC, and serves as a consultant for Pulte Homes. He also teaches a class on land use at the C.W. Post Campus of Long Island University.

Now, Don and his wife, Mary, have created an endowed chair that is named for Peter H. Reill, professor of history in the College and director of the Center for Seventeenth and Eighteenth Century Studies and the William Andrews Clark Memorial Library. Eversoll's freshman year at UCLA was also Reill's first year.

"Professor Reill was a fascinating, stimulating teacher—and very well prepared," Eversoll said. "He encouraged his students to think independently; he challenged us. He always had time to discuss issues with us. I thought he was a wonderful professor, and I'm happy to be able to create the chair while Peter is still active on the faculty."

Edward Alpers, chair of the Department of History, said, "Peter Reill's scholarship, teaching, and service as past chair of the Department of History, and currently as director of the



Donald and Mary Eversoll

"I hope the Peter Reill Endowed Chair will help the department hire and keep excellent educators who will stimulate young minds."

Clark Library, have earned him a well-deserved international reputation. The endowed chair that the Eversolls are establishing in his honor is a particularly welcome tribute to a very distinguished colleague."


As an instructor himself and in his consulting work, Eversoll enjoys contact with young people and encourages them to make decisions. He explained, "If it's the right decision, you'll learn from it; if it's the wrong decision, you'll probably learn more. But at least you'll be proactive."

One of Eversoll's goals for the Reill Chair is to enable the Department of History to continue to recruit and retain outstanding faculty members.

"I hope the chair will help the department hire and keep excellent educators who will stimulate young minds," Eversoll said, "and that it will enable the chairholder to do research and hire student assistants."

Department chair Alpers added, "This generous gift will greatly enhance the ability of the department to attract the very best and brightest scholar-teachers and graduate students, and maintain its high national and international standing."

Eversoll also hopes his gift will inspire other alumni and friends to support the College as generously as they can.

"It's imperative that those of us who are blessed help the College," he said. "Part of the enjoyment is in making the money, and part of it is in giving it away." 

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

# Ellis Island Please correct

“We come to UCLA from everywhere on this planet, carrying our dreams, the promises we make to ourselves. Some of us traveled all the way from the other side of this city.

**I wasn't even the first  
Bruin in my family.  
My great aunt went to  
UCLA when it was  
a teachers' college on  
Vermont Avenue.  
Then my aunt, my uncle  
and—finally—me.**

“Before we arrive, we have this idea that UCLA is the goal, the prize, the destination. Then we discover that it's the point of departure, and the real voyage has just begun.

“Walking into classes on the first day and being challenged by people who knew stuff you'd never even thought about, people who didn't agree with you about much of anything. And, they were just the other students.

“That daily contact with the rest of mankind taught me very quickly to be part of the process, to make my way in whatever society I found myself, anywhere in the world. Sacramento. Micronesia. Even Congress.

“So, where's the next big change, the next big opportunity? The global economy, of course. What's California's role? Are we up to the challenge? Absolutely.

“One. If you ever wonder what the rest of the world looks like, check out your local mall. California is the most diverse society on the planet, the first state in the union to become a majority of minorities. As the song says, we are the world.

# has moved. your records.

“Two. We start with a natural edge. It’s called ‘the Pacific Rim.’

“Three. None of this is new. California was a part of the global economy before it was a state. The rest of the world showed up here in 1849, looking for gold, and none of them went home.



*B.A. '56, UCLA. M.A. '67, Cal State L.A. Ph.D. '87, Claremont Graduate School. Teacher/School Psychologist/Administrator, LAUSD, 1958-76. California State Senate, 1979-98. U.S. Ambassador to Micronesia, 1998-2001. U.S. House of Representatives, 2001 to present. Democratic Regional Whip for Southern California.*

“So, what role should UCLA have in all this?

“The role it’s always had: to identify, select, nurture and educate successive generations of California’s leaders in business, government, the sciences and the arts. To pass on a renewable set of skills. How

**When I lived on this campus in the fifties, the word was already out: Berkeley owned Tradition. Westwood was The Experiment.**

to think. (Not what. How.) How to question, adjust, adapt, evolve and grow.

“Five careers after UCLA, I use that skill set every day. The voyage continues.”

## **Diane Watson. UCLA, Unabashed.**

## UCLA College of Letters and Science Continues to Enhance Academic Excellence

The College has raised more than \$98 million to date in support of students and faculty

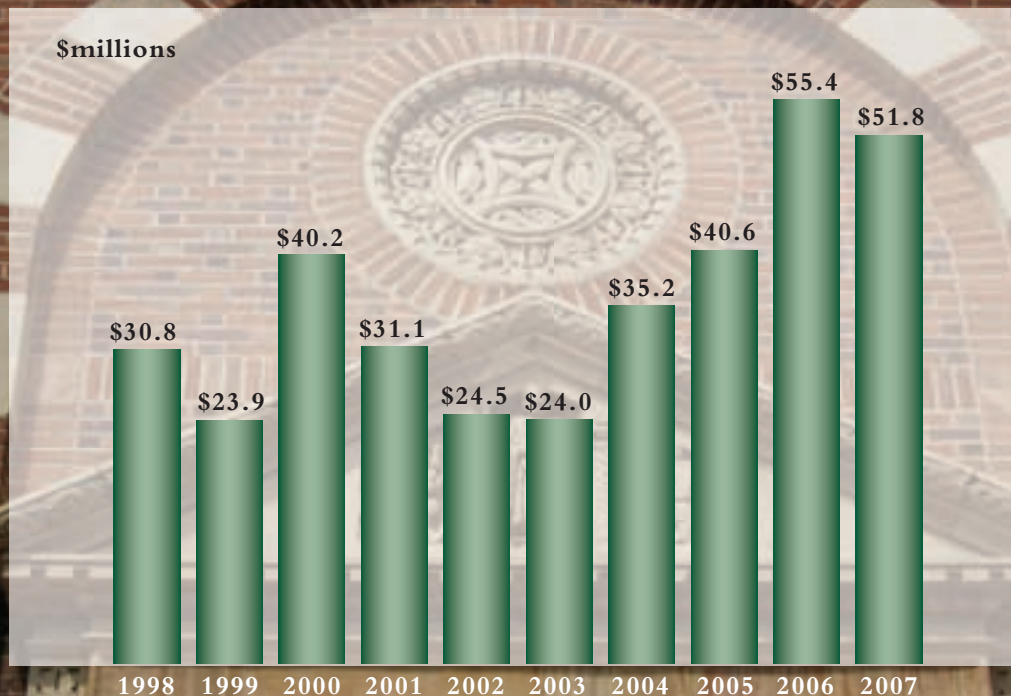
The College's three-year totals in the Ensuring Academic Excellence Initiative thus far include \$40.4 million raised for faculty support for endowed chairs, and \$57.6 million in student support for scholarships.

"The College has raised more support through the Ensuring Academic Excellence Initiative than any other academic unit on campus," said Patricia O'Brien, executive dean of the College. "These outstanding results to date are a tremendous demonstration of the commitment by the friends of the College to strengthening the core of UCLA's liberal arts tradition."

Launched in 2004, the Ensuring Academic Excellence Initiative is a strategy to enhance the ability of UCLA to attract and retain top students and faculty, generating private commitments that will better position UCLA as a premier research university in an environment of increasing competition. The initiative's goals include increasing the number of endowed chairs across the campus as well as additional funding for fellowship and scholarship support for students.

# UCLA

### UCLA College Gift History, 1998-2007



Fundraising for the UCLA College of Letters and Science reached near-record levels. For more news about the College, see page 4.

## UCLA COLLEGE REPORT

2300 Murphy Hall  
Los Angeles, California 90095

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