Know It All? See If You Do.
How today’s undergraduates are learning the skills we all need.

ALSO INSIDE
- Guantánamo Testimonials
- A Picture of Pixar
- Pushing the Bounds of Physics
- Notes from a Director’s Chair
Music Alumni Panel

Where did their music training lead them?

An event for anyone studying music or anyone interested in music. Free and open to the public.

A music degree can prepare you to be a musician, but it can also prepare you to be a professor, an investment banker, lawyer, politician, or anything else. The College of Letters and Science Deans’ Speaker Series is pleased to welcome three music alumni to the UC Davis campus on May 12. They all studied music at UC Davis, and their career paths have gone in three very different ways. One panelist is an associate professor of music at Pomona College, another the chief legal officer and general counsel at the U.S. Chamber of Commerce, and the third a financial advisor at Morgan Stanley.

Date: Monday, May 12
Time: 4:00 pm

Location: AGR Hall, Walter A. Buehler Alumni and Visitors Center. The event is free and open to the public.

Music Alumni Panel Speakers

Gregory Cheng (B.A., Music, ’88, M.A., Music, ’97) is currently a financial advisor with the Global Wealth Management Group at Morgan Stanley. Morgan Stanley is a leading global financial services firm providing a wide range of investment banking, securities, investment management and wealth management services.

Donna M. Di Grazia, Ph.D. (B.A., Music, ’83, M.A., Music, ’86) is an associate professor of music at Pomona College. While at UC Davis, Di Grazia studied choral conducting with Albert McNeil and musicology with D. Kern Holoman; she received her Ph.D. in musicology from Washington University in St. Louis. Along with her full schedule as a conductor, she continues to maintain her profile as an active musicologist and published scholar, and is a choral musician.

Steven J. Law, Esq. (B.A., Music, ’83) is the chief legal officer and general counsel of the U.S. Chamber of Commerce, the nation's largest public policy trade association. After studying composition and electronic music at U.C. Davis and earning a J.D. from Columbia Law School (Harlan Fiske Stone Scholar), Steven pursued a career in politics and government. He was chief of staff to Senator Mitch McConnell, executive director of the National Republican Senatorial Committee, and Deputy Secretary of Labor. He has managed national political campaigns, complex legislation and a multibillion-dollar federal agency – but he still writes and plays music in his free time.

Moderator: D. Kern Holoman, Barbara K. Jackson Professor of Orchestral Conducting
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On the cover: Students in an introduction to acting class. Photo by Paul Estabrook.
**LETTERS TO THE EDITOR**

I read “Generation Green” in your last issue and I thought you may be encouraged to know that we are doing our part in the business arena. I am a partner in the Fresno-based Generation Homes (www.generation-homes.com) which became the first in the valley to include solar electricity standard in all the homes we build.

—Scott Hulme, B.A., Economics, ’85

Regarding the articles that address ancient global warming (page 7) and current global warming (page 17), it seems there is conflicting information on global warming theories. It’s difficult for me to draw an intelligent conclusion about the current climate trends, and if humans are indeed responsible for the rise in temperature and CO₂ levels.

—Karen Thurston, B.A., English, ’82

I was glad to read Robert Woods’ article about his path to UC Davis as an African American man in the fall issue of Currents. When I was an undergraduate at Davis, my life was permanently changed by the many meaningful interactions I had with African American students. I can’t imagine how challenging it was for Mr. Woods and other African American students to be part of the 1% minority in the 1973 UC Davis student body. Even today African Americans make up less than ten percent of the population on campus. Reading Mr. Woods’ article reminded me of how many brave and patient African American people I met on campus who shared parts of their lives with me. I am grateful to have read Mr. Woods’ thought-provoking and genuine story. Thank you for printing it.

—Carrie Goehring Ziser, B.A., Women’s Studies, ’97

I was quite delighted to see the article on page 7 in the fall issue about the analysis of breast milk, from the lab of Professor Carlito Lebrilla. This is an ongoing collaboration between several researchers at UC Davis and Agilent Technologies, and I and others were quite involved with the installation and startup of the instrument there. So I feel the need to point out that the “computer chip developed by Agilent Technologies” is not a computer chip. It is a device made of polyimide (not silicon) used to separate the components by the mass spectrometer. This “HPLC-Chip” is more akin to the polyimide ribbon on some inkjet printer cartridges, both of which conduct tiny volumes of liquid using microfluidic channels etched in them.

—Dr. Patrick D. Perkins, Senior Research Scientist, Agilent Technologies

**CORRECTIONS FROM OUR FALL ISSUE**

Donors Making a Difference, page 23
The quote about the Needham endowment’s impact on the English department was incorrectly attributed to the department’s chair. It should have been attributed to Jessie Ann Owens, Dean of the Division of Humanities, Arts and Cultural Studies.

Faculty Notes, page 14
Barbara Sellers-Young was elected as president-elect of the Congress on Research in Dance, not president as was printed.
In June, I will be stepping down as dean of the Division of Social Sciences. I have had wonderful opportunity and good fortune to serve as one of the three deans in the College of Letters of Science for the past ten years. It has truly been a privilege to work cooperatively with so many talented people over the years — fellow administrators, faculty, staff members, students, and alumni.

Over the last ten years there have been many changes to the college. Our student numbers have grown rapidly, both at the undergraduate and graduate level. Our programs have increased sharply in quality as we hired hundreds of new faculty who brought their own ideas and perspectives to the campus. Our funding from grants and gifts has truly taken off. Our students are more engaged in research and scholarship than ever before. And, on the campus, the College of Letters and Science has increasingly been seen as the hub of intellectual activity.

But there are many things that have not changed. The doors of our faculty hallways are always open to students and colleagues. The campus is extraordinarily collegial and the sense of community is incredibly strong. The word “interdisciplinary” is truly an action here — scholars from across fields of study come together in the strongest sense of the word.

I hope that all of you — our friends and alumni, many of whom I have been fortunate to meet — will continue this legacy. I will look forward to watching our progress as we enter the second centennial of the university and the sixth decade of the College of Letters and Science.

Best regards,

Steven M. Sheffrin
WHAT MAKES A GREAT MOVIE?

A film that wins critical acclaim is likely to be an R-rated drama, adapted from a prize-winning play or book and based on a true story, with the original author or director involved in writing the screenplay. It is unlikely to be a sequel or remake, a comedy or musical, a summer release, a big-budget project, have a PG-13 rating, open on numerous screens or do a big box office on the first weekend. It probably has an excellent score, but it may not have an award-winning song. But box-office hits may have entirely different profiles.

Dean Simonton, a professor of psychology at UC Davis, has subjected thousands of feature-length, English-language, narrative films to a battery of statistical tests – including Pearson product-moment coefficients and hierarchical regression analyses – to get at the formula for cinematic creative triumph and box-office success.

Simonton, an expert on human creativity, is the author of Origins of Genius: Darwinian Perspectives on Creativity. He is at work on a new book, Great Flicks: Scientific Studies of Cinematic Creativity and Aesthetics.

“Exceptional creativity is frequently viewed as a highly individualistic phenomenon,” Simonton said. “But there is at least one type of artistic expression that is extremely prominent, often highly profitable and inherently collective in nature: the feature film. Motion pictures provide a valuable research site for investigating group artistic creativity under real-world conditions.”

HARRY POTTER, A SCHOLARLY ENDEAVOR

Most of us didn’t read the Harry Potter series with a critical eye, but this year, freshman students got the chance to do exactly that. Amy Clarke, a lecturer in the University Writing Program, offered a seminar last fall that required students to read all seven books, and discuss them in terms of their themes, literary merit, use of mythology and fantasy tradition, and their reflection of historical events. The films, intense fan involvement, and merchandising of Potter were also discussed.

“In all, we were really asking, why is Potter so popular and what does it say about our culture and times,” said Clarke. Even the course itself garnered media attention from the local television and newspapers. The students were thrilled with the attention, and the seminar, like the other freshman seminars, created an instant community students new to the university.

“Freshman seminars really help students feel connected to the campus,” said Clarke. “Because students can participate in the direction the class takes, they also have a sense of empowerment. The topics are, in some cases, far more interesting to them, so they work harder and more creatively than they do in other courses.”

And, Harry Potter, his friends and his arch-rivals may actually help students become better writers and critical thinkers, says Clarke. Students can take something they know well and are comfortable with, and dig in a lot deeper. Clarke
was pleased to see another benefit – the openness of the approach in the seminar actually helped students challenge each other, pushing past easy assumptions.

Freshmen can look forward to more wizard analysis; Clarke is offering the course in the spring.

**STORIES FROM GUANTÁNAMO**

With a feedback page that is “humbling for its praise,” the Guantánamo Testimonials Project’s only mission is to document the testimonies of those who have been within its walls, whether they be the guards and staff, the FBI, the Red Cross and lawyers who work there, or the 778 prisoners who passed through Guantánamo with hopes that trial dates would have come soon (currently there are just under 300 inmates there).

Almerindo Ojeda, the project’s director, is a professor of linguistics at UC Davis. The project itself is sponsored by UC Davis’ Center for the Study of Human Rights in the Americas (CSHRA), a working group of scholars from anthropology to religious studies, to history and law, who are keen to objectively study the situation at Guantánamo. And Ojeda makes sure that the project continues to grow; he receives testimony directly from the prisoners’ lawyers (whose own notes are cleared through a “review” unit at Guantánamo), as well as countless others who want to tell their story. He also posted analyses of leaks recently submitted to “Wikileaks,” a whistle-blower site which is supposedly untraceable to the person who submitted the leak. They were the Standard Operating Procedures for Guantanamo’s Camp Delta – documents which made waves when they hit the media.

The Guantánamo Testimonials Project is a website accessible from the center’s main page (http://humanrights.ucdavis.edu). It is #43 (or so) when you search “Guantánamo” on Google. Forty-third may not seem that great — page four when browsing — but out of the 1.28 million sites listed, it’s actually one of the most successful. It has been picked up by the Internet Archive, a project which is dedicated to the preservation of select websites and is carried out in collaboration with the Library of Congress and the Smithsonian. It has been reviewed favorably in the University of Wisconsin Scout Report and the University of Birmingham Institute site, and is now a part of the electronic wings of academic libraries such as Cornell Law, Dartmouth and Oberlin.

“The main mission of the Guantánamo Testimonials Project,” said Ojeda, “is to provide a place for all testimonies from Guantánamo to be without judgment. We are objective in our approach to the project. These testimonies are powerful – they speak for themselves.” Perhaps this is why the government has not sought to shut it down, something Ojeda had feared.

It is tough to be objective, Ojeda admits, when some of the testimonies are so graphic they are difficult for some to read. As a linguist, he is fascinated by the language that is used to describe some of the events behind the walls in Guantánamo, obscuring the impact of what was really occurring. “Drown proofing” is a means of interrogation known widely as “waterboarding.” Suicides are understated as “self-harm” events. And prisoner hunger strikes are referred to in almost religious terms as “voluntary total fastings.”

The Guantánamo Testimonials Project’s success has spawned a new research project to determine the physical effects of psychological torture, which will be carried out in conjunction with the UC Davis Center for Mind and Brain. “It is important to gather scientific data in this situation,” said Ojeda. “The more work we do on the scientific side, the more relevant we can make this issue on the social side.”

The project and the issue are receiving a groundswell of support. The University of California Office of the President (UCOP) just issued a three-year, $21,000 grant to CSHRA, part of the University of California Initiative for Human Rights that UCOP is sponsoring. “We are very grateful for this grant,” said Ojeda. “We are still at startup mode for our testimonials project. Although we already have three gigabytes of testimony,
there is more that we still need to archive. This grant will be a big help for us, as we support students to work on human rights at the University of California.”

In fact, undergraduate and graduate students have played a large role in the project — from technically building a website that would give viewers what they wanted to read, to analyzing the testimonials themselves before they are posted. And students are what Ojeda needs most to continue the project.

One piece of the project that was posted recently is the translation of a diary of a Muslim prisoner from Sweden, who was eventually released from Guantánamo. A Davis company called Transend translated the diary from Swedish to English as pro bono work, a $10,000 value.

“We are blessed to be in a community that cares about these issues,” said Ojeda. “And our next step is to continue the conversation in a more public venue. A few years ago we had our first ‘Conversations about Guantánamo’ event and more than 700 people attended.”

REAL-LIFE INDIANA JONESES

“Bone! I’ve got a bone fragment. Who’s got the bone bag?!” shouted senior anthropology and Italian major Adelina Asan, over the rising wind that was spreading in billows the fine dust that fell through her sorting screen. Fellow students at nearby sifting screens were quick to comply, flinging a zip lock baggie at her, amidst jokes and giggles.

Despite the camp humor, serious work was being done. The bone fragment from a small animal — along with pottery fragments, “worked” obsidian, beads and charcoal from fires — were further evidence of a shift in the social structure of Native American communities, from group or extended family organization to a focus on the nuclear family, centuries before Europeans came to the Americas.

Under the direction of Nicole Reich, an anthropology Ph.D. student (at Davis, archeology is part of the anthropology department), 14 undergraduates and several graduate assistants participated in the 2007 UC Davis archeology field school, first in the Owens Valley and later at the Punta Gorda Rockshelter, an archeological site on the Northern California coast.

For students, field schools are an important and necessary part of a degree, particularly if they choose a career in archaeology. Field schools provide students with demanding, extensive, hands-on training in archaeological field and lab techniques.

For archaeology major David Quivey, experiences like the field school — one of several he had worked in — are what caused him to switch from a history major. “Books and history are one thing but tangible objects are what I’m into … and I really like being outdoors,” he said while carefully shoveling gravel and dirt from a carefully delineated ancient structure floor into a bucket that was bound for the sorting screens. “I also really like working with current tribes. Meeting the tribe members brings a living perspective to what we’re doing.” The field school obtained permission from the Lone Pine Paiute Shoshone Reservation to dig at this location.

For Reich, in addition to teaching, the goal of the excavations is to gather evidence about how the shift from more generalized diets in the older, Haiwee period (1500–650 years before contact) to seed-intensive ones in the Marana period (650 years before contact to contact) correlated to changes in social organization. Reich is exploring the hypothesis that the Marana villages, when compared to older communities, would display a more closed community layout with smaller, more widely-spaced houses, an increase in inequality...
of household goods, and an increase in association of storage and cooking features inside dwellings. All of these features reflect how the accumulation of wealth changed social structures.

For senior evolutionary anthropology major Laura Brink, hypotheses like this are what drew her to the department. “I was a music major when I took physical anthropology for my general education requirement. I realized that I had an interest in human behavior – how it has been shaped over millions of years and why we do what we do.”

**MARS’ MOLTEN PAST**

Mars was covered in an ocean of molten rock for about 100 million years after the planet formed, researchers from the Lunar and Planetary Institute in Houston, Texas, UC Davis, and NASA’s Johnson Space Center have found. The work was published in the journal *Nature* last November.

The formation of the solar system can be dated quite accurately to 4,567,000,000 years ago, said Qing-Zhu Yin, assistant professor of geology at UC Davis and an author on the paper. Mars’ metallic core formed a few million years after that. Previous estimates for how long the surface remained molten ranged from thousands of years to several hundred million years.

The persistence of a magma ocean on Mars for 100 million years is “surprisingly long,” Yin said. It implies that at the time, Mars must have had a thick enough atmosphere to insulate the planet and slow down cooling, he said.

Vinciane Debraille, a postdoctoral researcher at the Lunar and Planetary Institute, Alan Brandon at the Johnson Space Center, Yin and UC Davis graduate student Benjamin Jacobsen inferred the early history of Mars by studying meteorites that fell to Earth.

Meteorites called shergottites document volcanic activities on Mars between 470 million and 165 million years ago. These rocks were later thrown out of Mars’ gravity field by asteroid impacts and delivered to Earth – a free “sample return mission” accomplished by nature.

By precisely measuring the ratios of different isotopes of neodymium and samarium, the researchers could measure the age of the meteorites, and then use them to work out what the crust of Mars was like billions of years before that.

Planets form in three stages, Yin said. First, dust collects into objects tens of miles across. In the second phase, gravity pulls these planetisimals into bigger objects, roughly the size of Mars or the moon. Finally, these small planets collide to form three or four larger terrestrial planets, such as the Earth – which is about 10 times the mass of Mars.

The giant collisions in this final phase would have released huge amounts of energy with nowhere to go except back into the new planet. The rock would have turned to molten magma and heavy metals would have sunk to the core of the planet, releasing additional energy. The molten silicate mantle eventually cooled to form a solid crust on the surface of Mars.

**GAMMA RAY DELAY MAY BE SIGN OF “NEW PHYSICS”**

Delayed gamma rays from deep space may provide the first evidence for physics beyond current theories. The MAGIC (Major Atmospheric Gamma-ray Imaging Cherenkov) telescope found that high-energy photons of gamma radiation from a distant galaxy arrived at Earth four minutes after lower-energy photons, although they were apparently emitted at the same time. If correct, that would contradict Einstein’s theory of relativity, which says that all photons (particles of light) must move at the speed of light.

“Everybody’s very excited,” about this result, said Daniel Ferenc, a physics professor at UC Davis and a
member of the MAGIC collaboration. Ferenc cautioned that the results need to be repeated with other gamma-ray sources and that a simpler explanation had not been ruled out. But, “it shows that such measurements are possible,” he said.

The researchers propose that the delay could be caused by photons interacting with “quantum foam,” a type of structure of space itself. Quantum foam is predicted by quantum gravity theory, an attempt to unite quantum physics and relativity at cosmic scales.

The astronomers pointed the telescope at Markarian 501, a galaxy half a billion light-years away that contains a “blazer” – a massive black hole that gives off bursts of gamma rays. Some of the material falling toward the black hole gets squeezed into jets that burst from the poles of the object at close to the speed of light. These jets fire off flares of gamma rays a few minutes long.

The researchers sorted high- and low-energy gamma-ray photons coming from the object with each flare. Joined by a group of theoretical physicists led by John Ellis from CERN (see Faculty Notes section for more on CERN), the MAGIC team showed that the high- and low-energy photons appeared to have been emitted at the same time. But the high-energy photons arrived four minutes late after traveling through space for about 500 million years.

**ENERGY FROM HOT ROCKS**

Two UC Davis geologists are taking part in the Iceland Deep Drilling Project, an international effort to learn more about the potential of geothermal energy, or extracting heat from rocks. Professors Peter Schiffman and Robert Zierenberg are working with Wilfred Elders, professor emeritus at UC Riverside, Dennis Bird at Stanford University and Mark Reed at the University of Oregon to study the chemistry that occurs at high pressures and temperatures two miles below Iceland.

“We hope to understand the process of heat transfer when water reacts with hot volcanic rocks and how that changes the chemistry of fluids circulating at depth,” Zierenberg said. “We know very little about materials under these conditions.”

The university team, funded by the National Science Foundation, will drill up to 4 kilometers, or 2.5 miles, into the rock. It will be one of three boreholes sunk as part of the Iceland Deep Drilling Project, which is supported largely by Icelandic power companies.

The island nation generates more than half of its electrical power from geothermal energy. Hot water and steam from boreholes can be used to run turbines for electricity or directly to heat homes and businesses. Iceland meets the rest of its electricity needs from hydroelectric power, and imports fossil fuels only for transportation.

The U.S. has lots of potential for geothermal energy generation, Zierenberg said. There are several plants in California, including the Geysers region in the north and at Mammoth Lakes. Although its share of energy generation in the state is small, the Geysers is the largest geothermal field in the world, Zierenberg said. There are also numerous abandoned oil and gas boreholes around the country – including in the Central Valley – that could potentially access hot water that could be used for space heating.

That would, however, require something of a cultural change. In Iceland, geothermal heating is used at a community level: hot water is pumped up and circulated around a town or neighborhood. Americans are more accustomed to individual power delivery, Zierenberg said.

The team expects to begin drilling this summer.
HANDSOME BY CHANCE

Chance, not natural selection, best explains why the modern human skull looks so different from its Neanderthal predecessor, according to a new study by Timothy Weaver, assistant professor of anthropology at UC Davis. The study appeared in the August issue of the Journal of Human Evolution.

“For 150 years, scientists have tried to decipher why Neanderthal skulls are different from those of modern humans,” Weaver said. “Most accounts have emphasized natural selection and the possible adaptive value of either Neanderthal or modern human traits. We show that instead, random changes over the past 500,000 years or so — since Neanderthals and modern humans became isolated from each other — can better explain these differences.”

Weaver and his colleagues compared cranial measurements of 2,524 modern human skulls and 20 Neanderthal specimens, then contrasted those results with genetic information from a separate sample of 1,056 modern humans.

The scientists concluded that Neanderthals probably did not develop their prominent brow ridges and pronounced overbites as adaptations to icy Pleistocene weather or the demands of using teeth as tools, as some anthropologists have proposed.

Instead, random “genetic drift” is the likeliest reason that humans acquired smooth foreheads and strong lower jaws. Weaver conducted the research with Charles Roseman, an anthropologist at the University of Illinois at Urbana-Champaign, and Chris Stringer, a paleontologist at the Natural History Museum in London.

YOUNG JEWS LESS ATTACHED

A new report on attitudes of young American Jews toward the Jewish state of Israel suggests that they may not be as solidly in support of the “homeland” as their elders. Ari Kelman, an assistant professor of American Studies, co-authored the study with Steven Cohen, a research professor at Hebrew Union College.

Their data showed that only 54 percent of the under-35 age group are “comfortable with the idea of a Jewish State,” whereas 81 percent of the 65 and older group are. And, only 48 percent of the under-35 group would view the destruction of Israel as a Jewish state as a tragedy, versus 78 percent of the older set.

This trend has many factors, Kelman and Cohen believe, and intermarriage is chief amongst them, although their study does not test for this. But the authors found that Jews of all ages in mixed marriages scored lower in attachment to Israel than do unmarried Jews or Jews married within the faith. Another factor — the effect of visits to Israel — counters the disaffection that the authors found. The more time that American Jews spend in Israel, the more attached to it they feel. And the younger set, most certainly, travels more often.

GRATITUDE IS A NEW SCIENCE

By Claudia Morain

Psychology professor Robert Emmons has shown that people who count their blessings — not just on the fourth Thursday of November, but in daily gratitude journals — exercise more regularly, complain of fewer illness symptoms, and feel better about their lives overall.

Compared with those who dwell on daily hassles, people who take time instead to record their reasons for giving thanks also feel more loving, forgiving, joyful, enthusiastic and optimistic about their futures, while their family and friends report that they seem happier and are more pleasant to be around.
“Gratitude is literally one of the few things that can measurably change people’s lives,” Emmons writes in his newest book, *Thanks! How the New Science of Gratitude Can Make You Happier*. Published earlier this year, the book outlines 10 strategies for cultivating a feeling of thanksgiving throughout the year.

Gratitude was unexplored terrain for psychologists when Emmons began studying it in 1998. His first research subjects were students in his health psychology class at UC Davis.

Then, the professor assigned some students to write down five things they were thankful for each day and others to record five complaints. Three weeks later, the grateful students reported measurable improvements in psychological, physical and social well-being compared with their complaining classmates.

During the next decade, Emmons conducted variations of the experiment in dozens of other study populations, including organ transplant recipients, adults with chronic neuromuscular disease and healthy fifth-graders.

“We always find the same thing,” he says. “People who keep gratitude journals improve their quality of life.”

Emmons says his 10 strategies can help anyone cultivate a more grateful approach to life. But he warns that the exercises are not for the “intellectually lethargic.” And he stresses that gratitude is incompatible with feelings of victimhood or entitlement, with the inability to recognize one’s shortcomings or with admissions of insufficiency.

“Far from being a warm, fuzzy sentiment, gratitude is morally and intellectually demanding,” he said. “It requires contemplation, reflection and discipline. It can be hard and painful work.”

Here are Emmons’ evidence-based prescriptions for becoming more grateful:

- Keep a gratitude journal. Write down and record what you are grateful for, and then when you need to reaffirm your good lot in life, look back in the journal.
- Remember the bad. If you do not remind yourself of what it was like to be sick, unemployed or heartbroken, you will be less likely to appreciate health, your job or your relationship.
- Ask yourself three questions every evening. Fill in the blanks with the name of a person (or persons) in your life. What have I received from ___? What have I given to ___? What troubles and difficulty have I caused ___?
- Learn prayers of gratitude. One Emmons suggests in his book from the Buddhist teacher Thich Nhat Hanh: Waking up this morning, I see the blue sky. I join my hands in thanks, for the many wonders of life, for having 24 brand-new hours before me.
- Appreciate your senses. One approach is to practice breathing exercises.
- Use visual reminders. For example, Emmons has a refrigerator magnet in his home bearing this quote from Eleanor Roosevelt: “Yesterday is history, tomorrow is mystery … today is a gift.”
- Make a vow to practice gratitude. “Swearing a vow to perform a behavior actually does increase the likelihood that the action will be executed,” the psychologist notes.
- Watch your language. It influences how you think about the world.
- Go through the motions. Research shows that emotions can follow behavior.
- Be creative. Look for new situations and opportunities in which to feel grateful, especially when things are not going well.

Though he practices these techniques, Emmons acknowledges that maintaining an attitude of thanksgiving is hard work, even for him.

“Most psychologists study what they’re bad at,” he explained.

However, his decade-long study of the subject has convinced him that Cicero had it right centuries ago, when the Roman philosopher ranked gratitude as the chief virtue, parent of all the others.
Known as the hardest working field worker in anthropology, J. P. Harrington logged more hours than anyone working in his lifetime (first half of the 20th century) and anyone since then. The result of his work? Books and books of notes, wax cylinders of sound, and photographs of Native American tribes across the West, some the only evidence today of languages and traditions in the Native American culture. His work was converted into over 400 reels of microfilm (1,000–2,000 pages per microfilm reel), and they currently reside in the National Anthropological Archives.

Unfortunately, microfilm can be hard to work with, and Harrington’s notes of these languages, cultures and traditions are in a combination of English, Spanish and Native American Chumash. Scholars and anthropologists have trouble reading the notes, as do the tribes that Harrington visited 100 years ago who might wish to retain their ancestry. Some tribes have accessed Harrington’s notes and created their own histories, but most tribes do not have this capability.

Enter Martha Macri and her team of graduate students. Macri, the Rumsey Rancheria Endowed Chair in California Indian Studies who has taught at UC Davis since 1988, began working with graduate student Lisa Woodward about eight years ago on transcribing the microfilms of notes into a database format so they are more readable. The Harrington Project was born. After two years of coding and translating, the project was successful in getting some of Harrington’s notes to tribes in the California area. It became so successful that the National Science Foundation has since paid graduate students to transcribe and code the notes. They are currently in their third two-year round of funding for the project.

“We have gone throughout the state and the West, giving workshops to the Native community, training them on coding the material themselves,” said Macri. “And we have delivered books of materials to many tribes, where only a few elders are left with this knowledge.”

Not only have the trainings been helpful in empowering Indian tribes to access this information directly in the microfilm, it has added energy to revitalizing the language of the tribes, said Macri.

The project itself is so intensive that “it’s not one we can finish in our lifetime!” said Macri. Every sentence from the Harrington notes is a record in the database. Then any Indian word that is read or translated is another field in that record, and its meaning is another field. That way, dictionaries of the languages can be generated.

“The tricky part is that languages have certain dialects in different regions,” said Macri. “For instance, Western Mono is spoken in the foothills above Fresno, and several dialects of that language exist within several different ‘political groups,’ which are federally-recognized tribes or language groups, or politically independent groups.”

Some of the Harrington notes currently being coded or checked in California languages alone are: Achomawi/Atsugewi, Coast Yuki; Chimariko; Chacheño/ Mutsun/Rumsen; Chumash Ineseño; Esselen; Gabrielsono; Kato; Kitanemuk; Luiseño/Juaneño; Mutsun; Northern and Central Pomo; Salinan; Serrano; Shasta/Karuk; Tubatulabal; Wilkchamni; Wintu; and Yana.

For a tribe they are working on, the team prints project reports, a typed version of everything Harrington wrote. And they include a word list, which gives output in the Native language to English and Spanish, and the other way around. The project has had great success, said Macri: “I think the most important part of the project is the work we’ve done with Native communities and placing that material in their hands.”

Martha Macri, Rumsey Rancheria Endowed Chair in California Indian Studies, in front of the recent basketry exhibit at the C.R. Gorman Museum.
**WHAT’S BEHIND THE SCENES?**

UC Davis students can learn the craft of directing and get an insider’s view of theatre and television, straight from a director whose experience ranges from London’s Royal National Theatre, to Broadway, to Hollywood. Sarah Pia Anderson, professor of theatre in the Department of Theatre and Dance, teaches students the exciting world of directing both at UC Davis, and in Hollywood where she works on television, film and theatre productions. Anderson’s most recent work in Hollywood has been directing award-winning television shows like *Ugly Betty*, and *Big Love* and *Women’s Murder Club*.

“Teaching and directing is a great balance for me as an individual,” Anderson says. “It’s a wonderful combination and a unique opportunity to give back some of the knowledge I’m acquiring while I’m directing.”

And it works both ways. Anderson says directing allows her to articulate theory through practice. She teaches undergraduates and is chair of the graduate directing program, and her position as a professional director allows her to connect her students to “real-world” experiences that can lead to career choices. Her classes in film production help students understand how their knowledge of theatre and dance can apply to the screen, whether large or small.

Anderson, who grew up in Great Britain, knew early on that she would become a part of the theatre. When she was a teenager, she recalls school trips to Stratford-upon-Avon to see Shakespeare. Attending the University of Wales at Swansea, Anderson studied English literature. When she graduated, she took a job as an assistant stage manager at the Traverse Theatre in Edinburgh.

“I loved being in the world of theatre instantly. It was fascinating to work out how to make something come alive on stage. I remember thinking, ‘I can do this.’” Working at the Royal National Theatre Company and the Royal Shakespeare Company, Anderson was a successful director in theatre before turning to other challenges. She did some work on and off Broadway, and then in television. And all, she says, are her favorites. She is intrigued by the different challenges that they offer, and brings that curiosity to her teaching at UC Davis, too.

“Even a student-run production here at UC Davis can be extremely challenging,” she says. “The pressure exists in venues like Wright Hall at UC Davis, just as much as it does on Broadway. And especially with student productions, the creative pressure is enormous.”

Anderson has a profile on the movie database IMDB that is pages long – her television directing includes credits from Emmy and Golden Globe award-winning hit series such as *Grey’s Anatomy*, *Big Love*, *Ugly Betty*, and *Prime Suspect*. She has enjoyed working with actors such as Alan Rickman, Helen Mirren, Blythe Danner, Angelica Houston, and Salma Hayek.

With the production that each episode of television requires, one director typically only does one or two episodes of that season. “It’s not physically possible to do more,” she says. “The typical day in directing a television show starts at 6 am and ends at 9 pm. With every episode of a television show, you prepare it, shoot it and then edit it. In preparing it, you look at and edit the script. Then you are out and about looking for locations or helping to design new sets that are built on the studio sound stages. Then casting for new cast members. And that’s just the preparation!”

Television requires all the same skills as film and theatre. But it’s faster paced and the stories evolve over a season rather than the time frame of a movie. Anderson says as a director, “it’s entirely about storytelling and how to create a plausible reality given all the different elements of writing, performance and design.”

Anderson is currently turning her hand to a different kind of film making. She is working on a documentary film project with UC Davis music professor Pablo Ortiz. This work will form the basis for her future teaching as well as contribute to her substantial experiences as a director in Hollywood. And the students at UC Davis will continue to benefit from her teaching and internship connections in all areas of the dramatic arts.
hair below the speed of light at particular interaction points, the thousands of particles that are created from a single high-energy proton-proton collision are measured by the five-story-high CMS Experiment, which is something like a giant camera. Essentially, CMS will take pictures of protons colliding with protons at an unprecedented high energy of 14 trillion electron volts. These pictures may even be of new forms of matter. And that’s where it gets even more exciting.

“The standard model of particle physics is well-tested,” said Breedon. “But if you make predictions out to the energy that will be produced by the Large Hadron Collider, things start to fall apart.”

Because the CMS Experiment is based at the LHC, the largest accelerator in the world (which incidentally uses the largest cryogenic system in the world since the magnets need to be cooled to just a couple of degrees above absolute zero to work properly), the principles of physics are being challenged as researchers question what will happen when such a great number of particles are smashed together at such a high energy.

The CMS project itself is now a massive collaboration of 180 institutes from 38 countries with over 3400 collaborators. Each institute shares responsibility for pieces of the experiment, combining engineers and physicists to make sure everything will operate properly together. And, because once the accelerator is operating the experiment will become

Blasting Particles Beyond Known Bounds of Physics

E=MC² watch out. Physicists from UC Davis are working with other physicists from around the world on the largest particle accelerator in the world. When it slams the first protons together at the end of this year, our understanding of the world may change forever. Known as the Compact Muon Solenoid (CMS) Experiment at the Large Hadron Collider (LHC), the project is based at the European Laboratory for Particle Physics (CERN), outside of Geneva, Switzerland.

“We just don’t know what’s going to happen!” That was the exclamation from Richard Breedon, a research physicist at UC Davis who has been on the project since 1992 when UC Davis became a founding member of the CMS Collaboration. Breedon, who joined UC Davis in 1988, is working with several other physicists at UC Davis, including the current dean of the Division of Mathematical and Physical Sciences, Winston Ko, to take the world’s largest particle accelerator live at the end of this year.

“We are trying to detect new forms of matter,” said Breedon, “And that could change how we view physics as we know it. Stephen Hawking is excited about the project, even hypothesizing that the accelerator could create mini-black holes.”

The LHC, the particle accelerator, is located 100 meters underground with a 16 mile circumference straddling the Swiss-French border. For the past 15 years, the UC Davis high energy physics group (which has more than a dozen physicists, engineers, and students dedicated to the project) has been heavily involved with the development of the cathode strip chambers of the endcap muon system and with the innermost pixel-based tracking system of CMS.

The accelerator uses super-conducting magnets that will accelerate two beams of protons traveling in opposite directions nearly parallel to each other. The vacuum in the beam pipe of the LHC is better than the vacuum on the moon. When the protons are made to collide at just a
In a radiation environment, the French Nuclear Regulatory Board oversees everything. The LHC project cost is close to six billion dollars, with more than twenty countries contributing. UC Davis’ collaboration in CMS is funded by the Department of Energy and National Science Foundation; and usually there is at least one physicist from UC Davis present at the project site.

“The project is exciting at so many levels,” said Breedon, who will be present in Switzerland from the end of this summer to help get the end-cap muon system of CMS going. “But at its most basic? We are trying to satisfy human curiosity about how the world works. We are all made up of particles – so what happens when some of these are crashed together at the highest speeds we can generate today is something that humankind will learn from for centuries to come.”

The project has also helped the UC Davis Department of Physics be at the very forefront of physics and see some of its best years yet in recruitment.

“LHC is truly an international endeavor. Physicists around the world are working together to discover the very inner secrets of matter by probing it at the high energy frontier,” said Winston Ko, dean of the Division of Mathematical and Physical Sciences and one of the pioneering physicists on the project. “UC Davis is preparing for this age of discovery by not only building up the experimental group, but also embarking on a High Energy Frontier Theory Initiative (HEFTI). What is more exciting is that the secrets of the inner space, through Big Bang, are intimately related to the secrets of the outer space. And cosmology at UC Davis has built up to national prominence.”

**LETTERS AND SCIENCE FACULTY NAMED CHANCELLOR’S FELLOWS**

Every year, UC Davis’ Chancellor invites a handful of faculty members who are just starting their careers to become “Chancellor’s Fellows,” created to acknowledge their work. Four of the six named this year were from Letters & Science: Milmon Harrison, associate professor in African American and African Studies; Robert Irwin, associate professor of Spanish and classics; Kai Liu, associate professor of physics; Richard McElreath, associate professor of anthropology. They carry the title of Chancellor’s Fellow until 2012.

**TOUGH QUESTIONS ASKED ON ASIAN AMERICAN MENTAL HEALTH ISSUES**

UC Davis has been awarded a five-year, $3.9-million federal grant to launch a national research center focused on mental health issues facing Asian Americans.

The grant from the National Institute of Mental Health will establish the Asian American Center on Disparities Research. Headquartered at UC Davis, the new center will support and coordinate the efforts of a network of researchers who study Asian American mental health issues. The network, which is expected to grow over time, will start out with 36 researchers from 18 universities in nine states, Puerto Rico and Taiwan.

“Health disparities” refers to differences in access to or quality of health care on the basis of race or ethnicity.

“Contrary to the ‘model minority’ myth, Asian Americans have serious needs for mental health care that have been inadequately addressed,” said UC Davis psychology professor Nolan Zane, director and principal investigator of the new center. “Not only are their rates of mental illness much higher than previously believed, but Asian Americans who enter into the mental health system tend to be more severely disturbed than other ethnic groups. In addition, there is compelling evidence that mental health services are inadequate for many Asian American clients, along with serious doubt as to whether treatments that have been validated with predominantly white patient populations are actually effective for Asian Americans. The center’s research will address these issues that continue to challenge the mental health field.”

The center will provide seed grants to support promising research; build an Internet information server, videoconferencing and data-sharing capabilities to make it easier for researchers nationally to share knowledge, avoid redundancy and isolation, and get technical assistance; inform mental health providers and policymakers about how to effectively serve complex, shifting Asian American communities; mentor young researchers on campuses that may not have senior faculty with expertise in Asian American mental health issues; and link researchers with community organizations that serve Asian Americans. The center will partner with the National Asian American Pacific Islander Mental Health Association, whose members include most of the mental health and health agencies nationwide that specialize in serving Asian American communities.

The new center builds on the National Research Center on Asian American Mental Health, also funded by the National Institute of Mental Health, which was housed at UC Davis from 1988 through 2002.
Last fall, UC Davis’ Chancellor signed an Agreement of Cooperation with National Taiwan University’s President Si-Chen Lee. NTU, as it is known, is Taiwan’s top university and the only one from Taiwan in the Association of Pacific Rim Universities, which UC Davis belongs to. Dean Winston Ko of the Division of Mathematical and Physical Sciences (who is also a professor of physics) signed a working agreement in particle physics with NTU’s Dean of Science Ching-Hua Lo.

A R A R E L O O K T O T H E P A S T

A new DVD collection compiled by Scott Simmon, professor of English, offers an unusual opportunity to look back more than 100 years and examine what issues influenced and advanced reform during the Progressive era. “Treasures III: Social Issues in American Film 1900–1934” was made possible through grants from the National Endowment for the Humanities and the Library of Congress’ National Film Preservation Board.

Films like the Ford Motor Company’s 1917 “Uncle Sam and the Bolshevik – I.W.W. Rat” shows Uncle Sam protecting the “fine work of our labor” from a rat labeled both “Bolshevik” and “I.W.W.” which represents the small union Industrial Workers of the World.

“The period saw the largest number of strikes in American history – involving four million workers or about 20 percent of the industrial labor force – and Henry Ford would have smelled a rat somewhere,” Simmon told ABCNews.com.

Simmon felt motivated to release the movies because he believes in their power. He suggests that while the films’ themes overlap, some of the more controversial issues are no longer addressed in cinema because of “commercial fears.” “Even these early films were subject to censorship,” said Simmon to ABCNews.com. “But what’s different is that there’s more of a commercial fear now about making sure not to offend any segment of an audience so that mainstream entertainment films don’t take on some of these issues.”

A N E W S E N I O R F E L L O W

Sundeep Dugar (Ph.D., Chemistry, 1984), a member of the College of Letters and Science Deans’ Advisory Council, was recently named Senior Fellow in the Division of Mathematical and Physical Sciences. Dugar is the third individual to receive the title, which is designed to promote engagement between extraordinary individuals of outstanding accomplishment and the activities of the Division of Mathematical and Physical Sciences at UC Davis.

“Sundeep has an established record of innovation, and his position promises to have a transformational impact on our work in pharmaceutical chemistry,” said Winston Ko, dean of the Division of Mathematical and Physical Sciences. “His help can lead to extraordinary advances and innovations.”

Sundeep Dugar, Founder & President, Sphaera
When you graduated from college, could you define “standard deviation?” Compose a visually powerful presentation? Avoid accidentally insulting your host when dining in a foreign country?

Chances are you could do one or two of them. But today's graduates from UC Davis will need to do them all. Why? Because statistics, visual literacy, and cross-cultural literacy have all become part of what it means to be an educated person today. And the College of Letters and Science has been advancing measures, formal and informal, to make sure every graduate meets those standards.

"On one hand, many would say the fundamentals of a well-rounded education have not changed. Good communications skills and writing skills will always be critical," says Pat Turner, vice provost of undergraduate studies at UC Davis. "But on the other hand, some would argue that certain areas, such as quantitative literacy, are becoming more and more critical to our lives."

As the concept of what constitutes an “educated person” evolves, so do the demands on the college, which is responsible for providing the vast majority of general education courses to UC Davis undergraduates. Preparing students to become creative thinkers and problem solvers is more important than ever in a world where most people change jobs every four years and advances in science and technology are continually changing the workplace.

“I read something recently that struck me as exactly what we are doing here at the college – we are preparing students for jobs that don't yet exist; and these jobs will use technologies that are still being invented,” says Maureen Miller, assistant dean of college relations and development.

Accomplishing that goal requires the college to continue advancing the critical thinking and problem-solving skills that have always been central to the idea of a university education. But it also means arming students with new problem-solving tools, some of which have not traditionally been emphasized by the liberal arts curriculum. The college is at the forefront of making sure graduates carry all those tools with them on graduation day.

New Requirements?

One clear example of the evolution of the term “liberal arts education” is the proposed change to the university’s general education requirements.

Since the fall of 2006 the general education task force has explored the question of what it means to be an educated person today. Headed by Jay Mechling, professor of American studies and recipient of the prestigious UC Davis Teaching Prize, the university-wide task force started from scratch, asking its members and the university community as a whole what a university-educated person should know today.

“There was a growing awareness that the existing GE requirements were not responsive enough to the challenges and complexities of engaged and informed participation in today's world, and that the old general education requirements were not making students feel excited and invigorated,” says Liz Constable, associate professor of French and Italian and director of film studies, who co-chairs the GE committee with Kathryn Radke, professor of animal science.

Those requirements, established in 1996, required classes in three areas: topical breadth, which required three courses in two subjects outside a student's major; socio-cultural diversity, which required a course that fostered cross-cultural understanding; and writing experience, requiring three writing courses.

After a year of weekly meetings, campus town hall meetings and...
GREAT TEACHING

When exploring the question, ‘what is a great education?’ it’s important to ask, ‘what is a great educator?’ Every year, UC Davis answers that question with the UC Davis Prize for Undergraduate Teaching and Scholarly Achievement. The prize, funded by donors, includes a cash award of $30,000, thought to be the largest of its kind in the nation. The College of Letters and Science is proud to be home to over half of the past winners in the almost twenty years it has been awarded. Three shared their own thoughts on teaching.

FRANCISCO J. SAMANIEGO, professor, department of statistics and director of the Statistical Laboratory, the division’s consulting arm

PHILOSOPHY ON TEACHING.
I believe in trying to encourage my students to stretch their minds, to be truly ambitious, to tackle goals that they thought were unattainable or that were not on their radar screens at all. Nothing makes me happier than to hear a student say “I never thought I could do this stuff” or “I didn’t realize this subject was so interesting (or fun or useful).”

WHY DO YOU ENJOY TEACHING? I love the feeling of facilitating someone’s discovery of an important idea or insight. This is the biggest payoff in teaching, and it’s why I’d rather do what I do for a living than anything else I can think of.

WHAT DO YOU TRY TO GET ACROSS TO YOUR STUDENTS WHEN YOU TEACH? I believe that critical thinking is the key to a successful professional life, so I try to get my students to think of my subject, statistics, as a collection of ideas and tools that’s just part of our overall artillery for solving problems of all sorts. I emphasize trying to use the tools one learns in new contexts. It’s a habit I hope students will form and will take with them well beyond their university years.

WHAT DO YOU THINK EVERY GRADUATE SHOULD KNOW WHEN THEY LEAVE UC DAVIS? Statistics, of course! But they should also have a passion for learning, some aptitude for problem solving, a genuine interest in reading and at least a basic facility with creative writing. Most importantly, I hope they will have a sense of the world and how they can contribute positively to it.

DEAN KEITH SIMONTON, distinguished professor and vice chair, psychology

PHILOSOPHY ON TEACHING.
In a nutshell, to be the kind of teacher that I wanted to have when I was a student.

WHY DO YOU ENJOY TEACHING? I love to see promising intellects grow.

WHAT DO YOU TRY TO GET ACROSS TO YOUR STUDENTS WHEN YOU TEACH? The facts, the abstract principles, their interconnections, and why all this is important and interesting.

WHAT DO YOU THINK EVERY GRADUATE SHOULD KNOW WHEN THEY LEAVE UC DAVIS? What it means to think. How to master new ideas. How to be critical and creative at the same time.

STANLEY SUE, distinguished professor, psychology and Asian-American studies

PHILOSOPHY ON TEACHING.
My goal is to create an environment in which students develop knowledge, curiosity, and critical thinking skills.

WHY DO YOU ENJOY TEACHING? I enjoy teaching because of the gratification received when students learn and develop some passion over the subject matter.

WHAT DO YOU TRY TO GET ACROSS TO YOUR STUDENTS WHEN YOU TEACH? Learning is a life-long process and they should develop the tools to enhance this learning.

WHAT DO YOU THINK EVERY GRADUATE SHOULD KNOW WHEN THEY LEAVE UC DAVIS? Education is a matter not only of gaining knowledge and learning skills but also of addressing social problems and value conflicts that confront our world.
Web forums, the GE task force drew up a proposal, on which the Academic Senate will vote in April. If the proposal passes, students would be required to complete courses satisfying requirements in four core literacies, beginning in fall, 2010: literacy with words and images, civic and cultural literacy, quantitative literacy, and scientific literacy.

“One of the most important elements of the new requirements would be a really strong attempt to integrate these core literacy areas into the curriculum,” says Constable.

“ Ideally, through the changes implemented in the new GE proposal, students will experience general education as a more integrated part of their overall undergraduate experience and not a burdensome requirement to add onto their majors.”

The task force also recognized that strong writing continues to be a key element in a liberal arts education—and that different fields require different types of writing. Scientists need to understand how to write an outstanding lab report, while history majors need to write compelling historical arguments. Thus, the new requirements would stress the importance of various genres of writing and require students to take a “writing in the major” course: a class within their major that emphasized writing.

“The new writing requirement would mean students develop writing confidence and competence in the genres appropriate to their discipline,” explains Constable. A “writing intensive” science class would not only teach content, but provide feedback on drafts of lab reports and allow students to revise their work. (See sidebar on The Write Stuff.)

Evolving Education

Some elements of the proposed requirements are controversial. Requiring every major to teach intensive writing courses, for example, could strain existing resources within a department. But whether or not the recommendations pass in April, they represent an important recognition that the world has changed.

“One hundred years ago, a well-educated person knew Latin and Greek. Today, they know history and economics,” says Steven Sheffrin, dean of the division of Social Sciences. They also know how to use Excel. “If you can write an essay and use a spreadsheet, you’re on your way to a successful career,” he says. Although his tone is light, his point is serious – the abilities to communicate in writing and to organize data are two critical skills in almost every job.

“Even if you get a Ph.D. in English, you might become a book editor and need to create a sales projection, so you have to understand how to present that data,” he says.
Winston Ko, dean of the division of Mathematic and Physical Sciences, goes one step further. “I take the radical position that every educated person needs some knowledge of statistics,” he says. “We live in a quantitative, data-driven society. We read about new studies all the time and base decisions on them. So we need to understand how credible those studies are—what was their sample size, was there a sample bias, for example?”

One way for students to gain a hands-on understanding of the scientific method is by participating in original research. On a national level, undergraduate research is increasingly appreciated as a way to teach not just quantitative and scientific literacy, but also build teamwork and collaboration skills. Today, some 52 percent of undergrads at UC Davis work on research projects, putting them at the forefront of this important national movement.

“Engaging in research is a great way to develop critical thinking and analytical skills,” says Gail Martinez, assistant vice provost of Undergraduate Studies.

Engaging with the World

In many ways, the proposed new requirements simply reflect ongoing shifts in students’ interests and passions in a rapidly changing world. More and more students insist on a global perspective in their studies.

“Students know we’re living in an increasingly interdependent world, and that global awareness and understanding are more and more important,” says Cris Breivik, outreach coordinator and academic counselor for the Division of Humanities, Arts, and Cultural Studies.

As students have become increasingly interested in learning to work cross-culturally, they’ve sought more chances to learn about other parts of the world, including study abroad opportunities. In response, the College of Letters and Science has made it easier to study overseas and still graduate in four years.

“Course work is more easily transferred and more directly applicable to majors and degree requirements, so you don’t have to jump through hoops to get your degree on time,” says Barry Pullum, co-director of undergraduate education and advising.
You can’t measure good writing via Scantron. No computer can teach a student how to convince a reader or make a paragraph crystal clear. Any way you slice it, the teaching of writing requires a commitment of time and critical thought.

That’s one reason why the proposed requirement for “writing within the major,” where every student would complete at least one writing-intensive course within his or her chosen field, has sparked controversy across campus. Although Davis for years has had a “writing experience” requirement, whereby students must do a significant amount of writing in at least three courses beyond the two-quarter composition requirement, this is the first time that teachers in every major would participate.

“Some faculty have raised an objection that for students to receive feedback and submit revisions of papers would be a heavy burden, depending on the size of the faculty and number of TAs in a given department,” says Pat Turner, vice provost of undergraduate studies at UC Davis.

To the rescue come ideas from the University Writing Program, which in 2005 spun off from the English department to form a free-standing program dedicated to developing student writers in the disciplines and professions. According to Chris Thaiss, the Clark Kerr Presidential Chair and director of the University Writing Program, one way to make the writing-intensive requirement manageable and most helpful to students is to spread the writing requirement — and the responsibility — across several courses within a given major. Another is to use new technologies to augment and enhance — although not fully replace — the effects of one-on-one feedback. Smartsite, the new online teaching and collaboration system adopted by UC Davis in the fall, offers intriguing tools that could help.

“Smartsite has a very comfortable platform for doing chats and wikis, where many individuals contribute in writing to building ideas,” Thaiss says. “Smartsite also makes it easy for students to get regular practice in writing, as well as to give feedback on their drafts to one another.” For example, Thaiss and UWP colleague Andy Jones worked with Professor Kern Holoman to set up a wiki for Music 10, one of the school’s most popular courses.

“Every student had to make at least one entry to this wiki every week,” Thaiss explains. Those entries could be concert reviews, observations on a particular music concept or other course-related issues. “That gave students a chance not only to express themselves without pressure, but to see what others were writing.” Through a wiki, professors can offer global feedback on themes or writing issues without needing to respond to every post. “That’s a very efficient way for students to write and professors to give helpful feedback,” says Thaiss. It also allows students to gain repeated practice in using the language and methods of the field, which boosts their facility as writers.

Innovative solutions like this helped the UWP win recognition for UC Davis in the 2008 US News & World Report college guide as one of 1.5 “stellar examples” of college writing programs. The program offers courses in writing for specific disciplines, like history and engineering, as well as classes on writing in specific professions, like journalism or law. To honor outstanding student writing, the department also publishes Prized Writing, a journal of outstanding student essays and scientific writing. In addition to its well-established workshop program to help teachers across departments build more writing into their courses, the UWP has proposed a writing minor for undergraduate students and is expanding its graduate course offerings in composition studies and rhetoric. The university’s commitment to the UWP includes adding three Senate faculty members in the next two years.

Such activities help students leave Davis with a highly marketable skill — strong writing.

“We are an information society. More and more our economy runs through the efficient, creative flow of information,” says Thaiss. “As a result, there’s a crying need in companies, in government, and in every other part of the life of the community for people who can put thought into words and are savvy about reaching different audiences.”
Exploring New Ground

Another way the College of Letters and Science supports the evolving definition of a well-rounded education is by allowing students the freedom to explore their intellectual interests. “We offer the flexibility and opportunity for students to drive their own interests, make their own course decisions and even make up their own majors. That’s a big strength of the college,” says Jim McClain, associate dean of the College of Letters and Science.

To make sure that every student can take advantage of that breadth and flexibility, the college is evolving to accommodate the needs of the changing student body. Not only has the campus community become increasingly diverse in the past few years, but many more students are the first in their family to attend college. This year, a whopping 40 percent of freshmen are “first generation” college students.

“Sometimes first-generation students feel great pressure to become doctors or economists or lawyers, but sometimes their aptitudes and interests are not in those fields,” says McClain. “We try to help them make choices that are good for them.” By emphasizing the importance of a broad-based education, he says, the college helps these students explore and discover their own unique talents and aptitudes, rather than fitting into a preconceived model.

For other students, he adds, financial pressures sometimes limit students from exploring a broad range of interests. “We think working less than 20 hours a week actually helps students,” he says. In those cases, he says, jobs help students prioritize and organize their time. However, with rising tuition, some students need to work 30 hours or more. The college is working to increase the number of scholarships it offers in order to better guarantee that all students have the time and energy to reap the full benefits of a well-rounded education.

Ultimately, the college’s continued exploration of what it means to be a university-educated person in a changing world will work to help students discover their inborn abilities and strengths. “We encourage students to follow their passions and interests,” says Pullum. “We believe that when students do that, ultimately, they’ll succeed at whatever career they pursue.”

Barry Pullum, undergraduate advisor, works with students every day to make sure they are on track to graduation.
EXCHANGE PROGRAM WITH ACADEMIA SINICA, TAIWAN, REFLECTS THE LEGACY OF ONE OF UC DAVIS’ MOST DISTINGUISHED SCHOLARS

Students and faculty in the sciences at UC Davis and Taiwan’s renowned Academia Sinica now have financial support to collaborate in person, thanks to a landmark gift from the widow of a longtime faculty member and her family.

Eleanor Yang, the widow of Shang-Fa Yang, and her family have pledged $330,000 to fund faculty, post-doctoral, graduate and undergraduate students to collaborate with Academia Sinica, the most prominent academic institution in Taiwan, and to host researchers from that university. The gift benefits scholars in the agricultural, biological and chemical sciences.

The Shang-Fa and Eleanor Yang Scholarly Exchange Endowment was created in memory of Shang-Fa Yang, a retired professor in the department of vegetable crops (which is now the Department of Plant Sciences) who was previously the Vice President of Academia Sinica. He passed away last year. Yang was excited about the prospect of a collaboration between the two universities, and shortly after his passing, UC Davis entered into an agreement to promote research with Academia Sinica, which was signed for UC Davis by both Chancellor Larry Vanderhoef and Dean Winston Ko of the Division of Mathematical and Physical Sciences. Ko will administer the new fund that supports the agreement.

Although the terms of the scholarly agreement were met before Yang’s passing, the final details surrounding the fund were pending. Eleanor Yang knew of her husband’s intent to sponsor the scholarly exchange and decided to continue his wish. “My two sons and I would like to secure Shang-Fa’s legacy in this way,” she said. “We are so happy to donate the funds to create a foundation of international scholarly exchange.”

The program is moving quickly, with the first Yang Scholars, as they will be known, being chosen soon for the next academic year. Scholars will be from the three areas that Yang specialized in at both UC Davis and Academia Sinica – agriculture, biology, and chemistry.

The UC Davis faculty and students who are able to visit Taiwan will be able to take advantage of some of the best equipment, said Ko. “Under its former president, Yuan T. Lee, and current president, Chi-Huey Wong, Academia Sinica invested heavily in state-of-the-art laboratories to establish itself as the top research institution in Taiwan,” he said. “Yang Scholars will be able to take advantage of equipment that we just don’t have here on campus.”

In addition, the endowment promotes more research to be done in both countries. It will facilitate up to 10 month-long trips per year for Taiwanese scholars to come to Davis. This level of support for international study and exchange is not available to most programs at Davis.

A native of Taiwan himself, Shang-Fa Yang joined the UC Davis faculty in 1966 and spent four decades researching the technical intricacies of plant
biochemistry. He authored more than 220 scientific publications, was elected to the National Academy of Sciences, and was awarded the prestigious Wolf Prize in Agriculture for his groundbreaking research on ethylene. His research unlocked the key to prolonging freshness in fruits and flowers. After retiring from UC Davis in 1994, Yang continued his career at Academia Sinica, first as a director of the institute of plant sciences and then as vice president until 1999.

"Shang-Fa Yang served both Academia Sinica and UC Davis with distinction, and he believed that both institutions would be enhanced through such a scholarly exchange program," said Ko. "He would be so pleased to have his family’s name tied to this excellent program."

**GRADUATE STUDENTS GET VITAL SUPPORT**

The political science and economics departments will be able to recruit top students from around the world, thanks to a generous gift of $200,000 from Kevin Bacon (B.S., Political Science, ’72) and his wife, Kim (CRED, Education, ’79). The gift establishes a much-needed base of support for current graduate students in the two areas, as well as helping with recruitment.

Kevin Bacon, who is currently serving on the UC Davis Foundation and the Letters and Science Deans’ Advisory Council, feels giving support to graduate students can help continue the important bridge between educating undergraduates and supporting important research and teaching.

"Financial support for graduate students is often neglected – it’s not as glamorous as endowed faculty positions and it’s not as politically popular as undergraduate support when it comes to state funding," said Bacon. "However, anyone who has been around the university very much knows that recruiting great graduate students makes all the difference – they help drive critical research and they make real personal contributions to undergraduate education."

**MOURNING FRIENDS AND FAMILY ESTABLISH FUND FOR OVARIAN CANCER RESEARCH**

When Jeanne Marquis ’92 read an article in the spring 2007 issue of College Currents about Professor Carlito Lebrilla’s research on ovarian cancer, she was rallying around her close aunt, Ann Garat, who was reaching the end of her long battle with the cancer. In thinking about how best to honor their special aunt, Marquis, with her sister Annemarie Schoaf, ’85, decided to establish the Ann Garat Memorial Fund. Proceeds of the fund will advance Professor Lebrilla’s chemistry research, which is looking for ovarian cancer markers as a method of early detection of the disease, when the cancer is most treatable. Marquis wants to honor her aunt and help all of those who would be diagnosed with the disease, which is one of the deadliest forms of cancer. Ovarian cancer is a high priority in Lebrilla’s lab, not only due to his groundbreaking research, but because he lost his mother to this hard-to-detect cancer.

Ann Garat was born in Elko, Nevada, raised in Oakdale, California, and spent much of the remainder of her life in the SF Bay Area. She was a working artist, a loving mother and a political activist, fighting tirelessly for the underprivileged. She lost her battle to cancer last May after having fought for five years with unwavering courage and defiance.

Marquis hopes the fund will continue to raise money for this important research:

“Watching my Aunt Annie’s life was like watching an exercise in spontaneity, art, political activism, spirituality, unconventionality and adventure. Seeing that journey cut short because of this terrible disease broke my heart. Ovarian cancer continues to be one of the few cancers with virtually no detection method and Dr. Lebrilla’s research is working to change that. I can only hope that supporting his important work will bring us closer to finding a much-needed cure.”
To donate to the Ann Garat Memorial Fund, please make checks payable to “UC Regents” and mail to Shari Kawelo, L&S Deans’ Office, One Shields Avenue, Davis, CA 95616. Questions? Contact 530-757-5781.

ENHANCEMENTS TO MPS PROGRAMS GIVE STUDENTS, FACULTY A BOOST

Alumni Sundeep Dugar ’84 and Cathy Dugar Angell ’85 recently gave a lift to chemistry programs in the Division of Mathematical and Physical Sciences (MPS). Their $100,000 donation will benefit a myriad of programs that give students and faculty the “extras” in their education that go beyond the things they learn and study in the labs.

Sixty-five thousand of the gift will establish a new fund to enhance the R. Bryan Miller Symposium for fellow chemists, an event that occurs every winter and features plenary speakers, such as Nobelist Robert Grubbs. Another $10,000 will add more to the fellowship endowment already established in Miller’s name that is awarded to graduate students in chemistry each year at the symposium. Finally, $25,000 will go towards discretionary funding that the dean and college will use to enhance a multitude of programs to benefit students, such as the MPS Graduate Student Prize, which honors the best MPS graduate student teacher.

“Both Cathy and I have had the privilege of attending UC Davis. Education and our ability to provide this to the future generations will be critical for their personal achievements, their ability to address and resolve issues that are local and global. We have been fortunate in our endeavors and with this small gesture wanted to recognize the role UC Davis has played in our lives. We hope that other UC Davis Alumni who are able to will want to similarly recognize UC Davis,” said Dugar of their recent gift.

Dugar is also active in donating his time to the university. A member of the Letters and Science Deans’ Advisory Council and a Senior Fellow of Mathematical and Physical Sciences, he recently accompanied MPS Dean Winston Ko on a tour of pharmaceutical companies in the Bay Area, helping to build bridges with the division’s new pharmaceutical chemistry degree track.

ANTI-GRAVITY FOR THE ARTS

Art students at UC Davis are fortunate to be a part of a top-ranked program, but coming into the art program as a transfer student can be challenging in many ways. Now, thanks to a $50,000 endowment, the program will be able to support students who are majoring in art studio who have transferred from a community college. The Marcia Cary Anti-Gravity Endowment Award is an opportunity for some students to attend a program that would have otherwise been inaccessible to them. Mark and Marcia Cary, both alumni from UC Davis, have given to the program in hopes to support future artists.

Marcia Cary (B.A., Art Studio, ’87) was herself a college transfer student. She went on to receive her M.F.A. at UC Berkeley in 1989 and is now an artist. Her hope is to help students who have passion and promise in the arts as they move forward in obtaining their degrees.

“I had a good experience and a lot of encouragement from my teachers at UC Davis. Art students need all the emotional and financial support (equaling anti-gravity) that they can get,” said Cary. “My mother-in-law, Anita Cary, gave gifts to her sons’ colleges, and we decided to continue this tradition.”
Charles Nash

Charles Presley Nash, professor emeritus of chemistry and a leader of the faculty at the University of California, Davis, passed away from complications of pneumonia. He was 75.

“Charlie Nash was one of our most active and engaged campus citizens, even well into retirement,” said UC Davis Chancellor Larry Vanderhoef. “He truly loved UC Davis and served it well, notably completing two back-to-back terms as chair of our Academic Senate – the first faculty member selected to do so. He was always interested in making sure faculty knew their role in shared governance, helping the university be the best it could be.”

Nash served those two terms as chair of the Davis Division of the Academic Senate. As chair of the senate, Nash also was one of the original signatories of UC Davis’ “Principles of Community,” in 1990. The document, ceremonially reaffirmed in 1996 and 2001, embodies the values of the Davis campus.

After stepping down as senate chair, Nash became active in the Davis Faculty Association, an independent organization for university faculty affiliated with the Council of UC Faculty Associations (CUCFA). He was a member of the board, served as chair for several years, and was elected vice president for external relations of CUCFA, a position he held from 1996 until his death, said Myrna Hays, executive director of the association.

Through the faculty association, Nash conducted forums to help faculty members find their way through the “briar patch” of academic promotions, and was very active in intellectual property issues.

Working with the faculty association at California State University, Sacramento, Nash and the Davis Faculty Association won legislation that protected the rights of professors to own the contents of their lectures.

“His contributions were enormous,” said Daniel Simmons, a professor of law who succeeded Nash as chair of the senate. “He was a constant resource, always there to help faculty members who were having problems.”

Nash was born in 1932 and educated at Sacramento Junior College before transferring to UC Berkeley, where he received his bachelor’s degree in chemistry in 1952. He then went to UCLA, where he received his Ph.D. in chemistry in 1958. He began working at UC Davis in 1957 and was appointed assistant professor in chemistry in 1959, rising to full professor in 1970.

His expertise was in physical chemistry, taking in a wide range of areas during his career. Fred Wood, associate vice chancellor for student affairs and a senior lecturer in the Department of Chemistry, said he was known as a “classic radio man,” or someone with a knack for fixing things.

He is survived by his second wife, Clinton Congdon Nash; three children from his first marriage, Nancy Holl of Latham, Md., Sandra Clark of San Diego, and James Roy Nash of Urbana, Ohio; stepchildren Maya and Dane Garnica, and Collin Nash, all of Davis; and five grandchildren. His first wife, Lois Brown Nash, died in 1999 after 44 years of marriage.

Donations may be made to the Charles P. Nash Prize, care of the UC Davis Foundation, 1480 Drew Avenue, Davis, CA 95618, attention: Melissa Ivanusich.
Charles A. Hayes, Jr.

Charles A. Hayes, Jr., a professor emeritus of mathematics, passed away in August at the age of 91. Hayes moved to Davis shortly following World War II and taught math at UC Davis for over thirty years. He received his Ph.D. in 1942 from UC Berkeley. He served in the U.S. Army until 1946 and was appointed as a lecturer in the UC Berkeley Department of Mathematics. He was then hired to teach mathematics at UC Davis in 1947.

While at UC Davis, Hayes served on numerous committees and was Secretary of the Academic Senate from 1969–74. He led the successful effort to obtain a chapter of Phi Beta Kappa at Davis, and served as president of the Faculty Club from 1959–60. He served as acting chair of mathematics from 1959–60, and as chair from 1959–64; during these years the department grew in scope and in numbers.

Charles was preceded in death by his loving wife, Lola. They were married for 49 years. He is survived by his son Rodney, daughter Laura and grandsons Max, Jeff and Andrew. Donations in his memory can be made to the UC Davis Department of Mathematics Scholarship Fund.

Matthew Rybicki, Julie Bryant

Two UC Davis students died in a car crash in December 2007. Matthew Rybicki was a senior majoring in history, and was a member of the UC Davis men’s rowing team, one of the largest sports clubs on campus. He was granted a posthumous bachelor of arts degree, as he planned to graduate in the winter commencement, and had enough credits to graduate. Julie Bryant started at the university in the fall of 2006 as a junior and was also a history major.
CALIFORNIA INDIANS GATHER

Elder wisdom and youth power emphasized at conference

By DJ Worley and Brook Colley

Courtesy UC Davis University Communications

As incoming Native American graduate students to the Department of Native American Studies, we were excited to participate in the 22nd annual California Indian Conference and Gathering, Oct. 26–27.

The conference and gathering was UC Davis’ opportunity for faculty, students and community members to engage the local Native American communities, listen to concerns and identify ways that the university and Native American studies department can work collaboratively with these groups.

In addition, this was a forum for Native American voices to raise their concerns, in native ways.

Ultimately, this was a time of sharing and socializing between California Indian people, a time to visit with old friends and meet new allies.

Since we are from Oregon and many of California Indians’ issues and types of knowledge are new to us, we were thankful for the opportunity to engage with and learn from our southern neighbors.

Many hours of hard work and individual effort went into this important event. Contemporary issues were raised and discussed, including concerns about cultural preservation, Native American health and the repatriation of our ancestors.

Much of the conference was geared toward identifying problems and, in some cases, articulating possible solutions.

Elder wisdom and youth power

A moving part of this event for us was the various elder circles and the Youth Pathways Conference, a component of the main conference specifically geared toward California Native American youth. These two activities acknowledged the wisdom of our elders and the power of our youth.

Participants had the opportunity to sit in various elder circles throughout the conference. These circles were established to provide space for the elders to speak on any issues.
As Native Americans, we value and honor the views of our elders. We need to be able to hear the voices of the elders who come from this land and have been charged with its care since time immemorial.

Our elders provide valuable understanding about the relationship between our traditional lands and their people and the accompanying responsibilities.

More than 50 youth

Youth Pathways attracted more than 50 youth. This part of the conference was focused on empowering Native American youths to continue their education.

A presentation was given to the parents about culturally relevant academic camps, which could be a tool that provides California Indian youths an easier transition into college and vocational training programs after high school. This is particularly important because of the lack of recruitment and low retention rates of Native American youths for the university. American Indians and Alaska Natives represent only 207 of the 29,796 students who enrolled in UC Davis this past fall.

Stickball and lacrosse

Traditional games such as stickball (which has similarities to California Indian games) and lacrosse were demonstrated at the youth conference.

Social events during the weekend displayed the community atmosphere. These included a film festival featuring Native American directors, an art show at the Gorman Museum showcasing beautiful California Indian baskets and a closing dinner sponsored by the Rumsey Band of Wintun Indians with performances by traditional Californian dancers.

In these ways, California Indians had the opportunity to share their distinct cultures with many native and non-native participants. The community at large was honored with traditional singing, games, dances, and stories of California Indian culture and struggle.
BREAKING GROUND

The Earth and Physical Sciences building is now under way after a November groundbreaking with UC Davis officials. The $65.5 million building is expected to open in 2009, and will house the Department of Geology, as well as teaching laboratories for the chemistry and physics departments. Photographed are Neil Schore, professor and vice-chair of chemistry; Louise Kellogg, professor and chair of geology; Barbara Horowitz, interim provost; Winston Ko, dean of the Division of Mathematical and Physical Sciences; and Shirley Chiang, professor and chair of the physics department.

PUBLIC INTELLECTUALS FORUM

The Public Intellectuals Forum is holding spring lectures that promise to challenge and provoke discussion amongst all who attend. The sponsors, the Davis Humanities Institute (DHI) and the Center for History, Society and Culture (CHSC), seek to bring important topics to discussion in locations that are accessible to the general public.

DHI Director Carolyn de la Peña said, “Overall, we hope to use the Public Intellectuals speakers series to bring compelling, challenging ideas out of the university and into the community. In holding the events at the historic City Hall in the city of Davis, rather than on the university campus, we hope to spark conversations, encourage engagement and build bridges between the academy and the public.”

CHSC Director Eric Rauchway added, “In choosing speakers, we look for dynamic and socially engaged scholars whose intellectual work addresses the issues of the day and speaks to educated citizens.”

The spring dates, all free and open to the public and located at Bistro 33, historic City Hall, 226 F Street in Davis, are:

Richard Taruskin, “Did Somebody Say Censorship?”
Thursday, March 6th, 2008
Talk: 5:30pm, Reception 7:00pm

Jill Dolan, “Feminist Public Intellectuals in the Arts: The Case of Playwright Wendy Wasserstein”
Thursday, April 17th, 2008
Talk: 5:30pm, Reception 7:00pm

Michael Bérubé, “The Left since 9/11: What Happened to Cultural Studies?”
Tuesday, May 6th, 2008
Talk: 5:30pm, Reception 7:00pm
UPCOMING EVENTS

C. N. Gorman Museum

Robert Davidson, Eagle of the Dawn: Northwest Coast Master

April 1–June 11, 2008

This exhibit features the work of Haida artist Robert Davidson (whose Haida name is guud san glans or “Eagle of the Dawn”), who is considered by his peers to be the premier artist of the Northwest Coast (the area from the tip of the Olympic Peninsula in Washington State through southeast Alaska). An introduction to his work, including some of the works in the show, can be found at www.robertdavidson.ca. The show includes sculpture and works on paper, hide drums, cloth, and woven spruce-root basketry.

Design Museum

Fashion Conscious: Designs that will change the world one garment at a time

May 15–July 13, 2008

As the fashion industry begins to embrace the green movement, how can everyday consumers make informed decisions? This exhibition explores sustainability and how it relates to the clothes we buy, from the ecological impact of eco-friendly textiles to the re-evaluation of industrial manufacturing. See exemplary designs by established and up-and-coming green designers.

Letters and Science Commencement

June 14, ARC Pavilion

http://www.ls.ucdavis.edu/commencement/

Music

Sun, Apr 13, 8pm–10pm
Studio Theatre, Mondavi Center

Empyrean Ensemble: The 51% Majority—Modern Works by Female Composers. Laurie San Martin and Kurt Rohde, co-directors. Pre-concert talk at 7 pm, “Demystifying the Music.” Tickets: $18 adults, $9 students and children; 530-754-2787

Sun, May 18, 8pm–10pm
Jackson Hall, Mondavi Center

UC Davis Symphony Orchestra, D. Kern Holoman, conductor. Mussorgsky: A Night on Bald Mountain (Jessica Bejarano, conducting); Wagner: excerpts from Die Meistersinger act III; Berlioz: Symphonie Fantastique. Tickets: $16/13/10 adults, $8/6.50/5 students and children; 530-754-2787

Nelson Gallery

Chinese Propaganda Posters

April 3 through May 18, 2008
Opening on April 10, 6–8 pm

Guest curated by Art History Professor Katherine Burnett, this exhibition highlights over 75 selections from the collection of Mr. Yang Pei Ming of Shanghai. It documents the use of powerful graphic design to create propaganda influencing popular opinion in the years 1948 to 1988 in the People’s Republic of China. Burnett is also organizing a symposium in conjunction with the exhibition.

Picnic Day

April 19

http://picnicday.ucdavis.edu/

Theatre and Dance

April 10–12 and April 18–20
(with special Picnic Day matinees)

Main Stage Dance/Theatre Festival is a wide-ranging venue for new choreography by undergraduate students, graduate students and UC Davis dance instructors. Tickets: Mondavi Center Ticket Office: (530)754-2787

May 15–17 and May 22–24

May features the staging of Measure for Measure by William Shakespeare, directed by graduating MFA Candidate Randy Symank. Known as one of Shakespeare’s “problem plays” because it contains both tragic and comic elements, Measure for Measure highlights the abuse of power and explores moral issues surrounding resistance to injustice. Tickets: Mondavi Center Ticket Office: (530)754-2787
Alumnus Gives Light

Lamar Heystek (B.A., Political Science, ’01, M.A., Linguistics, ’05) decided to help residents of the City of Davis (where he is a council member) light their homes in a more energy efficient way. Last fall, he offered energy efficient light bulbs to people who bring older incandescent bulbs to one of the weekly Farmers Market Saturdays. Heystek found a sale on compact fluorescent light bulbs and bought the entire stock to share with the public. “For every bulb you change, you change the world,” Heystek told the California Aggie.

Department of Water Resources

David Sandino (B.A., Chemistry, ’80, CRED, ’81) has been appointed chief counsel for the Department of Water Resources. Since 2006, he has served as acting chief counsel for the department, and previously held the senior staff counsel position from 1989 to 2006. Sandino is a member of the Davis Police Advisory Committee and a former commissioner of the Davis Planning Commission.

Best Place to Study?

When Robert Gifford was a senior at UC Davis, he conducted an informal poll of his fellow students as to where they were studying — their desks or their beds. He wanted to compare the grade point averages of the bedlings to the desklings to see which group excelled. It launched Gifford and his psychology department mentor, Robert Sommer, into an eight-college, study-habit survey titled, “Bed or Desk?” Their 1968 article in Personnel and Guidance Journal gave the definitive “no difference,” when it came to GPA. Gifford and Sommer found that of the above-average scholars surveyed, half studied at their desks and half on their beds. Of the below-average students, 47 percent studied on their beds and 53 percent at their desks.

Gifford and Sommer are well-known environmental psychologists, and often advise on the design of libraries, classrooms and study environments. They recommend comfortable furniture. “Desks are really confining, and cubicles are worse than desks,” Sommer told the Bismarck Tribune recently. They suggest that students work wherever comes naturally.

Fulbright Recipient Works in Guatemala

Fiona Laurie (B.A., Art History, ’05) of At-Large, California, was awarded a Fulbright scholarship to travel to Guatemala. Laurie is one of over 1,300 U.S. citizens who will travel abroad for the 2007–2008 academic year through the Fulbright U.S. Student Program. Fulbright re-
ALUMNI updates

Participants are among over 30,000 individuals participating in U.S. Department of State exchange programs each year.

Laurie’s project examines how indigenous Guatemalans feel about making and selling items for tourists. She will also look more closely at the ways in which organizations are encouraging micro enterprises in Guatemala, and whether these enterprises help alleviate poverty.

Wiki World

Philip Neustrom (B.S., Mathematics, ’06), Arlen Abraham (B.S., Food Science, ’07) and Charles McLaughlin (B.A., Psychology, ’02) are taking the Wiki to a new level in the local Sacramento/Davis area. They created the Davis and Sacramento Wikis to help locals and visitors navigate their way around the two areas. Just like the ever-popular Wikipedia, where anyone can add, change or delete entries, the Davis and Sacramento Wikis take contributions from anyone.

“We see ourselves as a way to help these communities in a new way,” Neustrom told the Sacramento Bee.

And what’s different about the Davis Wiki? It’s believed to be the first English-language community Wiki website. Thanks to its success, the creators have established a nonprofit called Wikispot.org, which provides tools for anyone to create a Wiki. Wikispot has generated geographic communities as well as special-interest communities.

“It’s all about everyone jumping in,” said McLaughlin, who would like to see more contributions from smaller areas of Sacramento in the Wiki.

To make your contribution, you can go to http://www.daviswiki.org or http://www.sacwiki.org.

EDITOR’S NOTE: L&S alumni, please submit your stories and updates to: collegecurrents@ucdavis.edu
**Archetypes and Allegories**

**Through Art**

Mythical and archetypical life-size figures weren’t what artist Lisa Reinertson (BA, Art, 1982 and MFA, Art, 1984) set out to create. But they have become fertile soil to express so much more — situations, events and even entire decades.

Reinertson’s first public piece of art was the life-size sculpture of Martin Luther King, Jr., which stands in the entry to the UC Davis Law School.

Reinertson also did a bronze depiction of Cesar Chavez, which is located in downtown Sacramento. “I remember joining the march from Delano to Sacramento when I was eleven, with my parents. The evening before everyone was to march to the State Capitol, we all gathered in Our Lady of Guadalupe Church and Cesar Chavez spoke to everyone there. I was very moved by seeing him and hearing him speak, and moved by the spiritual and ethical strength, and warmth and humanity of this man.”

Reinertson came to UC Davis as a single mother, working towards finishing her undergraduate degree, then moving to her masters work in the art program, which she says she couldn’t have done without a great support structure of affordable housing and affordable tuition. Her teachers were mentors — and she doesn’t say this lightly. She learned from artists now regarded as legendary: Robert Arneson, Manuel Neri, and Wayne Thiebaud.

“I was mostly immersed in doing ceramic art at the time,” she recalls. “TB-9, where we made our art, was about the whole community of students there, and it was a magical place that Robert Arneson created. Students and teachers interacted with each other, learned from each other, and no matter what your level, you were treated as an artist. There was this sense of ultimate freedom and ultimate challenge.”

Reinertson began doing large-scale female figures at TB-9. One of the assignments they were given from Arneson was to create a teacup with its pedestal being of equal importance. Reinertson ended up with a mother in a high chair, holding a stack of teacups, with a baby crawling at her feet. That summer, she did her first female standing figure, an area she enjoys working in to this day. To Reinertson, the archetypes of women have inspired endless territory to explore.

“I was really glad I did an art degree at a four-year university that required courses unrelated to art. I took anthropology and Greek art history courses. All of that informed the art that I did.”

Reinertson’s teacher mentors helped her learn that she, too, wanted to teach art. She taught at California State University, Chico, for many years. She continued to do her publicly commissioned art after the King statue at UC Davis Law School. Now, she is doing both teaching and art, teaching at UC Berkeley, creating both public and private art.

Where she will be working in the future of her art is always evolving, Reinertson says. And always, her works will display the archetypical and allegorical narratives that are important to all of us.
Pixar’s Academic Rigor

Tony DeRose (B.S., Physics, ’81) and his research team spend a lot of time looking at algorithms in search of a combination of solutions to produce light. And they look at combinations of numerical equations to produce the way rain drops into a puddle. And still another set of number crunching, done on high-powered computers using proprietary software, to generate the way a coat will fall onto a character’s body.

DeRose is a senior scientist at Academy Award-winning Pixar Animation Studios, known as one of the world’s best in producing animated movies. He heads up a team of computer scientists that look to make the details of animation even better with each film.

“When I first arrived at Pixar just before the first Toy Story was released, just about everyone was an innovator,” he said. “We took technology and helped to make animation seem more and more real. Over time, the studio continued to create movies on a three-year production cycle. But some of the animation improvements needs five or six years to implement into movies. So, our group is committed to tackling the longer-term problems. We are fortunate to maintain the spirit of innovation that makes Pixar so great – assuring that the complexity of the animation will continue to improve.”

DeRose is no stranger to running laboratories. After receiving his Ph.D. in computer science at UC Berkeley, he became a professor at the University of Washington, where he started a graphics lab. Computer graphics was evolving rapidly in the late 1980s and early 1990s, and he went on sabbatical to work at Apple and at Xerox PARC. There, he met and worked with Pixar’s Michael Kass.

To be able to solve graphics problems at a place like Pixar is fascinating, DeRose admits. And, he is able to retain the scholarly rigor that he feels is so important to the industry. He and other colleagues regularly publish papers on their work, something unexpected from a movie studio. Sharing secrets? “Yes,” says DeRose. “It’s part of how we all can improve animation. In publishing papers, you expose your work to peer review. It forces you to be more disciplined.”

When DeRose was at UC Davis, he studied physics, one of the most fundamental of the sciences. “It is a great discipline for teaching you to solve problems and expand on solutions.” And, DeRose continues to have an affinity with UC Davis, where he volunteers as an industry advisor to the computer science department.

Pixar recruits students from UC Davis and other universities regularly – continuing the culture of innovation. DeRose still seeks to improve computer animation just as much as he did when he worked on one of the first short films that advanced the entire industry – the first short done by Pixar after Toy Story, Geri’s Game. The character Geri is an elderly man who sits in a park, playing chess against himself. At the time when it was released in 1997, it was revolutionary.

“With the character Geri, we didn’t have good methods for representing complex shapes,” said DeRose. “I did some geometric modeling, and then Michael Kass took this modeling and added the physical simulation like clothing, hair, and lighting. It was a big effort for our group.”

Today, DeRose says, the technology behind animation is widely available. Pixar’s strengths in story and art direction set it apart from a vastly competitive market. And the innovation done in DeRose’s lab, he hopes, will help set it apart technically from the rest as well.

Investing time in higher education is also as vital as the work done in the lab, says DeRose. “Part of our job in research is to partner with universities. We remain engaged in the creation of new technology, and give talks and studio tours to help us continue to get bright graduates to work with us and expand our abilities.”

With new media cropping up every year, DeRose is excited about the new opportunities that lay ahead with Disney as Pixar’s parent company. He hopes that Pixar can expand the stories they tell into new arenas. And, as always, with scholarly rigor and critical thinking to make it better.

Editor’s Note: Pixar’s new film, WALL•E, is set for release on June 27, 2008. Stay tuned!
SOME THOUGHTS ON TEACHING

I’m sure that my love of teaching originated in my Boy Scout experiences. The genius of the Boy Scout program is that boys teach boys real skills that interest boys — how to use a knife, how to build a fire, how to paddle a canoe, how to handle a snake, and so on. There is some book-learning in Scouts, and I enjoyed teaching that material, too (I was a counselor for the Nature badges at camp), but whatever I was teaching — a skill or knowledge — I experienced the great pleasure of empowering a younger man. I had made a gift to that boy, just as older young men had given me gifts of skill and knowledge. That is pure pleasure, selfish pleasure, even if it’s the pleasure of giving something away.

From 7th through 10th grade I thought I was headed for a career as a naturalist, but my life changed when a friend talked me into taking a debate class in the 11th grade. I loved debate, especially the fact that I and a partner would have to prepare and argue both a case in favor of the proposition and against the proposition. We did not call it “critical thinking” then, but that’s what it was — the ability to see both sides of a question before finally landing on one or another (or even a position somewhere in between). I thought I was headed for law school then (goodbye naturalist), but becoming an American Studies major as a pre-law major at Stetson University (a small liberal arts university in Florida) quickly made me realize that a college professor did all the things I thought I’d love about the law — researching, writing, speaking.

American Studies fit my cognitive style. I was as interested in sociology and anthropology as I was in history, literary criticism, and art history. As an interdisciplinary field that stressed a “way” of thinking about cultural materials rather than defining its goal as accumulating large bodies of knowledge about the field (an impossible task), American Studies stressed “critical thinking” before educators cooked up that slogan. It is not that the facts of American experience are unimportant; but we stress connections. A question like “How is jazz music like a skyscraper?” may sound crazy to some, but those with an American Studies cognitive style find exciting the question and the pursuit of its answer.

The other exciting aspect of American Studies that I try to convey to students is the value of “reflexive” study — that we are studying our own culture(s) toward understanding the relationship between our own individualism and autonomy and the larger cultural systems we live in. We try to step outside of the “taken-for-granted” attitude toward everyday life and make what seems so familiar seem strange. The radical sociologist C. Wright Mills wrote in *The Sociological Imagination* that the function of sociology should be “to connect private troubles with public issues,” and that’s a good statement of the goal of a reflexive American Studies.
If I have done my teaching job well, my students will no longer be able to take their everyday lives for granted. The goal is not to freeze them in inaction but, rather, to liberate them, for them to see (for example) how what they believe is a human creation, a contingency among many possibilities. I want them to see how media narratives tap a deep, unconscious knowledge we have, and how that knowledge bears certain ideologies. Ideas have consequences. After the analysis we might still land at the same place regarding an issue, but we do so with a greater sense that we have chosen that position, it has not chosen us.

I respect what students already know and I seek to build on that, to provide them with some ideas and language for understanding their innate knowledge. For that reason, I value student fieldwork projects, where it is the students who are gathering the information, bringing it back to classroom, and leading our interpretation of what they find. This is easy for some of the courses I teach (folklore, popular culture, youth cultures, for example), harder for others, but I always want to show respect for what they know and I never want to “blame” them for what they do not know, or for skills they do not have.

Defining a university education in terms of the “facts,” ideas, or methods learned is doomed. You can never learn enough facts and in some fields the facts and ideas will have changed within a few years of graduation. A well-educated person should have acquired critical thinking skills and the communication skills (writing and speaking) for sharing the results of that thinking. A well-educated person is a critical consumer of persuasive messages aimed at her throughout everyday life, messages as diverse as political rhetoric, advertising, or popular entertainments. As the product of a small, liberal arts university, I value the broad liberal education I received and I aim to provide my students (who are undergraduates at an institution far different from mine) something like that liberal arts education.
In February, March and April these students will be calling to ask alums of the college to make contributions to celebrate Letters and Science students and the college that will shape their lives. They will be building on the success of the college’s inaugural phone program, which raised more than $100,000 in 2007.

We’re calling you!

Why are these College of Letters and Science students smiling and why do they look so confident? Maybe it’s because they’re part of the College of Letters and Science team of student callers for the telephone outreach program. They enjoy being part of a program that helps make the college a better place. These students are just a few of the callers who will be reaching out to you to ask for a donation to the college.

The funds raised last year are being used immediately where the need is greatest. This took the form of new faculty recruitment – the college hired 30 new professors last year to help meet the needs of increasing enrollment. The funds also served as “academic venture capital” in the creation of new programs such as the Center for the Evolution of the Global Economy which studies globalization. And, the funds were used to enhance existing programs, such as the From Colliders to Cosmic Rays Physics Conference which allowed UC Davis students to interact with leaders in a cutting-edge field of study.

Donors to the Letters and Science Annual Fund distinguish themselves as patrons of higher education and believers in the vital role the college plays in the lives of all students, providing the foundations of knowledge they will use throughout their lives. And, because Letters and Science is the heart of UC Davis, touching nearly every student in every major through core curriculum, the funds help set the academic and intellectual standard for the entire campus. Listen for the call this spring!
The Richard L. Nelson Gallery and Fine Arts Collection houses both modern and ancient works of art. Director Renny Pritiken and Collection Manager Robin Bernhard are studying three objects from Edward Nagel, a collector who donated many works to the Nelson: an ancient rendering of an ear of corn, thought to be Peruvian, made of gold; a 17th-century Southern Indian wooden elephant; and a gold Roman coin from the 11th century. These and thousands of other works of art will look forward one day to a home in the planned UC Davis Museum of Art.