Evolving Education
Today’s students must be prepared to compete in a technologically driven global economy. What are educators doing to help them?

It’s a Crime
Keeping bad bugs at bay is a job for UCR’s CSI (Controlling Sinister Insects) team.

Sound Equals Sight
Alumnus Dan Kish teaches echolocation – the ability to “see” with the use of echoes.

Borders and Boundaries
Borders: They can keep us safe and make us feel secure. But the ability to look beyond borders and to blur the boundaries can provide an opportunity to find new ways to improve not just our individual lives but all of humanity. Take a look as we explore the possibilities.
Music, Mingling, Murder and More

For more on UCR events, look on the Web at www.events.ucr.edu.

4.5-5.12
Master of Fine Arts Exhibition 2007
The UCR Sweeney Art Gallery features the work of UCR students Matt Bryant, Cheryl Gilge, Jason Lutz and John Sisley, with a reception at 7-9 p.m. April 14.

Sweeney Art Gallery

4.13
Soweto Gospel Choir
Direct from South Africa, the Soweto Gospel Choir performs in eight different languages by Jim Alexander.

Theatre UCR

4.28-7.07
Li Zhensheng, and Christy Johnson and 33 Confessors
Li Zhensheng, a Chinese photojournalist, captured turmoil amid revolution, and Christy Johnson explores how the female body is socially and sexually constructed in these two exhibits.

CMP UCR

5.11-12, 5.18-19
Sweeney Todd
Stephen Sondheim’s epic musical tale of murderous “barber-ism” and culinary revenge mixes intense drama with moments of dark humor. Directed and choreographed by Jim Alexander.

Theatre UCR

5.16
Author Series
Susan Straight, professor of creative writing, will read from her latest book, “A Million Nightingales,” as part of the UCR Libraries’ Author Series.

Library UCR

5.20
Primavera in the Gardens 2007
This ninth annual fund-raiser for the UCR Botanic Gardens includes live music, wine and food from local restaurants and caterers.

Gardens UCR

5.11
Chancellor’s Distinguished Lecture Series
Robert Engle, 2003 Nobel Laureate in Economics, will speak. This year’s theme for the series is “Changing our Ideas, Changing our World.”

EMP UCR/CDL

6.15-18
Commencement 2007
UC Riverside’s 53rd Commencement will be held on the Pierce Lawn, near the UCR Bell Tower.

Commencement UCR

Beyond Borders

If you wonder where the world will be tomorrow, look at where universities are today. Throughout higher education, the trend is toward internationalization, global learning and cultural fluency. The success of a campus in transcending its borders may be measured two ways: programs and personnel existing on-site, and those that are sent abroad. UCR is doing both.

Nowhere is UCR’s “borderless” community more evident than in our many international research collaborations. Since 1995, Research Physicist Ann Heinson from the Department of Physics and Astronomy has co-led a team of 30 international physicists — dubbed the DZero Project — that first detected a subatomic particle, the top quark, produced without the simultaneous production of its antiparticle partner.

The team includes 18 universities and laboratories spanning four continents. Ten of the 50 team members are women — double the proportion of women in high energy physics and another border expanded.

Associate Professor of Chemistry Ludwig Bartels designed a molecule that can move in a straight line on a flat surface, then developed a method to make the nanowalker a molecule carrier. All experiments in this study were conducted by a team of graduate students and postdoctoral researchers who hale from Sweden, Ireland, Germany, Russia, China, Korea, India and the United States. This international effort took place right here at UCR, where fully 29 percent of our graduate students are international, the highest percentage in UC.

UCR also participates in the international exchange of ideas through the Fulbright Scholars program. This year we have two Fulbright Scholars. One will lecture and conduct research at the Bangladesh Rural Advancement Committee in Dhaka; the other at the Central School of Lille in Villeneuve d’Ascq, France. At the same time, the campus is hosting scholars from the University of Malaga in Spain and the University of Bialystok in Poland.

An international focus appears throughout the curriculum, from the new global studies major to Latin American and Southeast Asian studies to film and visual culture to our Education Abroad Program. University Extension has opened highly successful international education programs in Beijing and Seoul — centers that I encourage you to visit should you find yourself in those cities.

Over the years, UCR has entered into international cooperative agreements and educational exchanges with more than 60 universities, stretching from South America to Europe to Asia. Most recently, I signed agreements with Shanghai Jiao-Tong University and China Agricultural University, where our faculty have burgeoning research collaborations. The campus also provides leadership to UC MEXUS, which fosters exchange between the UC system and academic institutions in Mexico.

I personally have been honored to participate in two stimulating international programs in recent months. In Kyoto, Japan, I took part in a rich exchange between foremost scientists and political leaders at the Science and Technology in Society Forum, a conference on social responsibility in scientific advancement and the impacts of new technology on society. In January, I was a guest of the U.S. State Department in Kuwait in an effort to bring together women of science across international and cultural borders.

Not every border is geographic. As you will read in these pages, UCR faculty, students, alumni and staff are transcending borders of intellect, culture, technology and discipline. In so doing, they — and others around the world — are shaping our world of tomorrow.

Sincerely,

Chancellor, Franc A. Cordera
EPA Funds Research to Detect Drinking Water Contaminants
UCR scientists have received a $600,000 grant from the U.S. Environmental Protection Agency (EPA) to develop a fast and effective means of detecting disease-causing viruses in drinking water supplies.

The work holds global interest because it addresses the issue of finding and treating viral contaminants and other disease-causing, waterborne viruses in water systems.

The research project is being spearheaded by Wilfred Chen, Ashok Mulchandani and Nosaig Myung from the Department of Chemical and Environmental Engineering, and Marylynn V. Yates of the Department of Environmental Sciences.

The grant is part of the EPA’s National Center for Environmental Research and is funded through its Science to Achieve Results (STAR) program.

Commencement Ceremonies Move, Get a Makeover
UC Riverside’s commencement ceremonies are getting a major makeover this year – a new location, additional ceremonies and tickets for guest seating.

The six ceremonies will take place June 15 through 18 on the Pierce Lawn east of the bell tower. The new plan also includes limiting the number of seats available to the families and friends of graduates.

“We are planning to give up to 12 tickets per student,” said Kyle Hoffman, assistant vice chancellor for alumni and constituent relations. “But we also know that all students won’t request 12 so some students may get more. What I think we achieve with this new format is we’ve brought back the intimate setting and as a consequence our graduates will have a more personal experience and a much lovelier setting.”

Find out more at www.commencement.ucr.edu.

Twenty-One UCR Faculty Receive AAAS Fellowships
The American Association for the Advancement of Science (AAAS) has named 21 UC Riverside faculty members, including the chancellor and the dean of the College of Engineering, as 2006 AAAS fellows.

This represents the largest single-year contingent from the campus and the largest from within the UC system. The selection of this year’s fellows brings the number of UCR faculty who have received this distinction to 150.

The AAAS has awarded the fellow distinction to 449 of its members this year. They are being recognized for their efforts in advancing science applications that are deemed scientifically or socially distinguished.

The 2007 AAAS fellows are:

- Bourns College of Engineering: Reza Abbaschian, dean and professor of mechanical engineering; Wilfred Chen, professor of chemical and environmental engineering; Marc Deshusses, professor and chair in the Department of Chemical and Environmental Engineering; Tao Jiang, professor of computer science and engineering; Dimitrios Morikis, professor of bioengineering; Victor G.J. Rodgers, professor of bioengineering; Charles Wyman, professor of chemical and environmental engineering.
- College of Humanities, Arts and Social Sciences: Christine Ward Gailey, professor of anthropology and women’s studies.
- College of Natural and Agricultural Sciences: Gay Bertrand, Distinguished Professor of chemistry; Katherine A. Borkovich, professor of plant pathology; Franco A. Córdova, chancellor and professor of astrophysics; Shou-Wei Ding, professor of plant pathology; Jodie S. Holt, professor of plant physiology and chair in the Department of Botany and Plant Sciences; Bai-Lian Li, professor of ecology, botany and plant sciences; Umar Mohideen, associate professor of physics; Joseph G. Morse, professor of entomology; P. Kirk Visscher, associate professor of entomology; Shizhong Xu, professor of plant genetics; Jory A. Yarmoff, professor of physics; Marylynn V. Yates, chair in the Department of Environmental Sciences and professor of environmental microbiology.
- Graduate School of Education: Jan Blacher, faculty chair and professor of education.

UCR Proceeds with Plans for Medical School
UCR has begun a national search for a founding dean for its proposed School of Medicine and will also hire initial faculty and staff, develop curriculum that focuses on improved health care in both primary and specialty care, and seek private support.

These moves come after a November vote by the University of California regents to allow UCR to proceed with planning for the school.

Mark Rubin, a longtime Riverside area commercial and residential property developer, and his wife, Pam Rubin, have designated that some of the proceeds from a real estate gift they made to the university be used to endow a chair for the medical school’s founding dean. Campus officials estimate that this will mean at least $3.5 million for the chair when the property is sold – the largest chair endowment in campus history.

Projected to open in fall 2012, UCR’s School of Medicine would serve the medically underserved in Inland Southern California and would be the first new public medical school west of the Mississippi since 1971.

UCR plans to submit a final proposal and refined business plan to UC officials by the end of 2007. Both will go through review by the UC Academic Senate, the California Postsecondary Education Commission, the Liaison Committee on Medical Education and the regents.

More information is available at www.medschool.ucr.edu.
National Group Awards Low-Emissions Vehicle Research

The Transportation Research Board, a division of the National Research Council, has given UCR's College of Engineering-Center for Environmental Research and Technology (CE-CERT) its Pyke Johnson Award.

The award, which recognizes excellent research in transportation systems, planning and administration, acknowledges the impact of a 2005 paper titled Measuring and Modelling Emissions from Extremely Low Emitting Vehicles, which was authored by CE-CERT Director Matthew Barth; researchers John Collins, George Scora and Nicole Davis; and Professor of Chemical and Environmental Engineering Joe Norbeck.

The CE-CERT researchers developed an emission measurement program for a new class of vehicles that are 98 percent cleaner than catalyst-equipped vehicles of the 1980s. They also developed emissions models from those measurements. Then they applied those models to future emission inventories in regional air quality models.

UCR Researchers Named Fulbright Scholars

Two UCR researchers will take their research on the road after being named Fulbright Scholars. The Fulbright Scholars Program is one of the most prestigious international education programs in the United States.

Dehabarshi D. Bhattacharya, an associate research physicist at UCR's Institute of Geophysics and Planetary Physics, will travel to Bangladesh Rural Advancement Committee in Dhaka, Bangladesh, to lecture on and research curriculum development and gamma-ray imaging collaboration. Mohsen Elhafsi, associate professor at the A. Gary Anderson Graduate School of Management, will conduct research on managing inventory and capacity in contract manufacturing at the Central School of Lille in Villeneuve d'Ascq, France.

UC Riverside Officials Inaugurate Altix 4700 Supercomputer

As speakers extolled the virtues of UCR's latest acquisition to a room full of professors, students, administrators and the press at the Bourns College of Engineering on Feb. 2, the guest of honor whirred away in a mostly empty, bone-chilling room several doors away.

The cause of the enthusiasm was the Altix 4700 supercomputer, which is designed to boost high-end computing and data analysis in engineering, bioinformatics and computer science by up to 1,000 times.

Laxmi Bhuyan, a professor of computer science and engineering and one of the principle investigators, obtained a $330,000 National Science Foundation grant that helped obtain the refrigerator-size Altix 4700.

The system, the largest single Altix 4700 in the University of California system, is powered by 64 Intel Itanium 2 processor cores and features 128 GB of system memory. It can also be expanded to 1,024 Intel Itanium 2 processor cores and up to six terabytes on a single Linux operating system.

In bioinformatics and proteomics – the technology that made TV shows like “CSI” hits – new investigations in Altix technology shows promise in curbing the time it takes to get results from a sample of unknown origin down from three days to less than an hour, said Eng Lim Goh, chief technology officer at SGI, the Silicon Valley company that sold the supercomputer to UCR.

Insulin Heals Wounds

Insulin is a hormone known primarily for regulating sugar levels in the blood, yet researchers at UC Riverside have discovered that applying insulin directly to skin wounds significantly enhances the healing process.

Skin wounds in rats treated topically with insulin healed faster. Surface cells in the epidermis covered the wound more quickly and cells in the dermis, the deeper part of the skin, were faster in rebuilding blood vessels.

In follow-up studies of human skin cells in culture, Professor Manuela Martins-Green and her colleagues explored the molecular impact of applying insulin on keratinocytes, the cells that regenerate the epidermis after wounding, and on microvascular endothelial cells, the cells that restore blood flow. Chronic or nonhealing wounds take an immense toll on American health and on health-care systems. It particularly affects millions of patients with impaired mobility and those with diabetes. Because diabetes is a disease caused by impaired production or utilization of insulin, this work may help explain the connection between diabetes and poor healing.

Martins-Green worked with Y. Liu, who is on leave from the burn department of a university medical center in Shanghai, China; and M. Yao, who is now at the Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School, Boston, Mass.

Three UCR Engineering Professors Named IEEE Fellows

The Institute of Electrical and Electronics Engineers (IEEE) has elected Jie Chen and Ilia Dumer, from the Department of Electrical Engineering, and Walid Najjar, from the Department of Computer Science and Engineering, as 2007 IEEE fellows. The IEEE is the world’s leading professional association for the advancement of technology.

Chen was cited for his contributions to fundamental design limitations of feedback control in electrical and electronics systems. Dumer was cited for his contributions to error-correcting codes. Najjar’s citation focuses on his contributions to data flow and reconfigurable computing architectures.
What's a border anyway? Just an often-imaginary line that divides belief systems, people, organizations, countries and disciplines. Today, parallel revolutions in science, business, politics and other fields are challenging the very existence of borders — driving top thinkers to look across them, erase them, find common ground, create new unions. Very often, the synergistic, groundbreaking research where disciplines overlap and borders dissolve is the catalyst that accelerates human development.

Interdisciplinary departments continue to spring up at UCR in response to these revolutions. Evolving consumer conduct online spawned the creation of the Sloan Center for Internet Retailing, where human behavior, economics and technology intersect. Advances in nanotechnology and demands for new medical devices have led to a new Department of Bioengineering. And the University of California Institute for Mexico and the United States (UC MEXUS) grew from the recognition that the interdependence of the two countries was fertile ground for research.

A passport-free Europe. Manmade glands. Click-through bricks. Everything we've thought about borders may be obsolete. To learn whether UCR’s interdisciplinary approach to education is a metaphor for the diminishing importance of borders in all aspects of life, we invited several UCR professors to discuss this trend. What they reveal might surprise you: In almost every area of our lives, making the lines between us more permeable brings us closer together. By Bob Rucker
The past few decades have seen a quiet revolution at the border between biology and engineering, as doctors, patients and insurers have sought the advantages of non-invasive diagnostic tools, bioengineered hormones, artificial organ implants and medical devices that transcend the fading boundary between inorganic and organic materials.

Distinguished Professor of Bioengineering Jerome Schultz is a well-known pioneer in the field, an engineer/biologist whose research has been applied to devices that mimic, modify and control the human body’s biological systems. One such device is an implantable biosensor, a less-traumatic way to monitor blood sugar in millions of diabetics — especially children, with their legendary fear of needles and blood.

“Diabetics should check their blood glucose levels as often as five times a day, to prevent conditions that lead to loss of eyesight, kidney function, nerve damage,” said Schultz. “In children, that usually requires a parent’s help. If we could...
decades ago, "Something there is that doesn't love a wall." In "Mending Wall," he tells of walking the border with his neighbor, patching a stone wall that doesn't love a wall. "Like the human immune system that seeks and rejects foreign objects, human societies often seek to separate 'us' from 'them,' relying on borders — sometimes fences and walls — to keep foreigners out. But as Robert Frost wrote nearly a century ago, 'Something there is that doesn't love a wall.' In "Mending Wall," he tells of walking the border with his neighbor, patching a stone wall that does not share the will of its builders to stand up over time.

Ask an expert in international relations and he or she will tell you that a border — even a manmade one — has a will of its own. Roberto Sanchez-Rodriguez knows about the permanence and the permeability of walls and borders. He's the director of UC MEXUS, a professor of environmental studies at UCR and an expert on the boundary between the United States and Mexico.

"In our department, we've adapted dynamic questions like 'how much?'" One role of UCR's Department of Bioengineering, then, is to bring together the qualitative and dynamic approaches to biomedical problems and create an environment in which engineers and biologists work as a team.

"This gap between these otherwise complementary disciplines exists partly because biologists don't typically study a lot of math, and engineers don't typically study much biology," Schultz said. "Our program in bioengineering strongly emphasizes life sciences — organic chemistry, biology and biophysics. But we also focus on the math-heavy, technically rich engineering discipline."

Like biological systems, universities find ways to adapt to changes in the world around them. As an engineer forever looking for new ways to integrate his training with biology, Schultz would look to the natural world, not surprisingly, for tips on adapting his department to the changing world.

"I'm always amazed at how plants, animals and bacteria all develop multiple solutions for surviving in exactly the same environments. Biological systems have parallels in the social world," Schultz said. "Like animals, different societies have developed different solutions to optimizing their performance and, ultimately, their chances of flourishing in the same environment. The important thing to realize is that no one solution is 'the' best."

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decades, a new industrial corridor has cropped up in Tijuana, Mexico's Tijuana-Rosarito Industrial Park, and Ensenada, as U.S. companies established factories across the border.

Meanwhile, the United States has become heavily dependent on Mexico for inexpensive labor, drawing a constant flow of immigrants north, he adds.

In fact, just about every transborder issue, from economics to agriculture to politics to pollution, has this immigration component, according to Professor Armando Navarro. Navarro is a professor at UCR's Department of Ethnic Studies and has strong opinions on the subject.

He's about to publish a book that chronicles the history of immigration on the U.S.-Mexico border. Each year, more than 4.5 million people pass through the world's busiest port of entry, just 10 miles south of UCR's campus, at San Ysidro. Most are workers commuting to jobs throughout Southern California.

Navarro says poverty and low wages in Mexico conspire with the U.S. economy's seemingly permanent reliance on inexpensive labor to both push and pull Mexican workers through San Ysidro and other border crossings, legal or not. While a "nativist mindset" in the United States and a growing movement to increase wages and investment in farms and factories in Mexico may lead to at least a temporary reversal of the centuries-long Mexican diaspora, Navarro says, "until there are structural changes on both sides of the border, the traffic in labor will continue across the 'cactus curtain.'"

How and when will those structural changes come about?

"Historically, a dynamic border has proved beneficial for both countries," argues UCR Professor of Anthropology Michael Kearney. "The money that comes into Mexico in the form of small money orders or in the shoes of returning workers rivals tourism as a source of trade. And it's a net benefit to the United States, especially to California, to have the immigrant labor."

Rather than fighting the inevitable, Kearney suggests, both countries might do better to admit, at least, that the U.S.-Mexico border has long been an effective "labor management mechanism" disguised as immigration control. "Border restrictions have been loosened when the U.S. economy is expanding; enforcement has been tightened when the U.S. unemployment rate is up. It's like opening and shutting a valve for labor."

While the issues are clearly complex, people on both sides, like Robert Frost, sometimes worry what their border is falling in and walking out. Generations of cross-border traffic have helped energize the border states with cultural riches from both sides, Sanchez-Rodriguez said. It's no surprise that the music, food and art found in San Diego or San Antonio are more like that found in Mexico than in Michigan. Both countries are better off for the exchange, he says.

Common sense says the question of whether to maintain a border between two countries is largely one of deciding whether the positives outweigh the negatives. Are we nearing that point? Not in our lifetimes, says Sanchez-Rodriguez. Although there will probably always be a border of some type between the United States and Mexico, a European Union-like solution, with a free flow across the borders of like countries — would not work here. Instead, he said, the solution for the foreseeable future lies in "acknowledging that we're asymmetrical neighbors. The goal is to make the best of the opportunities and minimize the negatives," says Sanchez-Rodriguez.

Retailers Become E-tailers

orders are not always in the physical world — they’re sometimes theoretical, like those in cyberspace or between business models. Few people have studied the latter — the border between traditional bricks-and-mortar
It seems that book buyers appreciated Amazon.com just a few years later. Caught off guard by the appearance of bookstores in the early 1990s, Borders began a successful expansion of its bricks-and-mortar facilities, Hoffman says. Borders quickly launched its own e-tailing site, but just as quickly found another route to customers who were migrating online. They joined with Amazon — which was challenged to find growth opportunities at the time — and created a co-branded site. Enter borders.com on your Web browser today and you’ll be whisked to a site that looks a lot like Amazon. The alliance has benefitted both companies, turning would-be competitors into collaborators. Another border dissolves; profits ensue.

“The Internet has had profound and important effects on behavior and commerce,” said Hoffman. Before the Internet was commercialized, she said, businesses generally treated consumers as an “audience” — passive recipients for the advertising and other messages businesses sent out through “one-to-many” broadcasting media like print, billboards and TV. But because the Internet is a “many-to-many” medium, it “allows consumers a host of new ways to interact with commercial enterprises and to provide content for the benefit of each other.”

The result, Hoffman says, is that every business of any size has been compelled to build a Web presence into its marketing strategy — not to mention adopting Web-based inventory management systems, interacting with wholesalers online and, equally important, getting closer to customers through “multichannel” links on their home pages and other online avenues.

When evaluating how the Internet has redrawn the borderline between consumers and sellers, one need look no further than apply named Borders Books, Hoffman says. Borders began a successful expansion of its bricks-and-mortar business in the early 1990s, but was caught off guard by the appearance of online bookeller-cum-mass-merchant Amazon.com just a few years later.

It seems that book buyers appreciated the convenience of buying online and the level of information — including product reviews — available from Amazon. Indeed, Hoffman foresees a big impact of the Internet on the real estate market — a crucial issue in the Inland Empire, the fastest-growing part of the United States. In real estate, Hoffman predicts that this wealth of fast-paced information will expedite real estate cycles. The truth may very well be known in the next few months, as we watch the latest developments in the state and national real estate markets.

“...eBay could not exist in the physical world. They are in no way involved in handling merchandise. They simply stand on the border between customers and facilitate transactions.”

— Donna Hoffman

“The last time the real estate market crashed, in the early 1990s, it took more than 18 months for the average homeowner to realize prices were collapsing. That’s because the information was broadcast from Realtors, the financial markets and the media to the mass market audience by newspapers and TV,” she says.

“This time, the cycle will be shortened by the real-time availability of information over the Internet. The entire Multiple Listings Service is now available online. Web sites track price reductions in real time and offer instant estimates of a home’s value. Scores of blogs don’t discuss the impending crash, they offer realms of insightful and scary analysis.”

Finally, consider the auction. Once a quaint method of disposing of fine art collections or dilapidated farms, mention “auction” today and almost everyone thinks of eBay. eBay surfs a different kind of border than, well, Borders, Hoffman says.

“Ebay is a pure play — a business that takes full advantage of the unique aspects of the Internet. In fact, eBay could not exist in the physical world. They are in no way involved in handling merchandise. They don’t have a store. They simply stand on the border between customers and facilitate transactions.”

What lies ahead?

“The Internet has redrawn the borders in the business world in a fundamental way,” says Hoffman. “As it becomes more deeply embedded in the way we live, and as we find ourselves moving from the desktop to the laptop to mobile phones and PDAs that are Wi-Fi enabled, we’ll increasingly have a 24/7 connection to products and services. It will become harder and harder to tell where the physical world stops and the digital world begins.”

A Global Education

What exactly is globalization? Some call it a big step toward worldwide instability. Others foresee a borderless utopia. A select few go on to ask how and why globalization is happening in the first place and how to iron out its challenges. Those students will eventually find their way to UCR’s new Department of Global Studies or to UCR Extension’s International Education Program (IEP).

Appropriate to a program that looks across borders, the global studies program, which opened its doors as part of the College of Humanities, Arts and Social Sciences (CHASS) in fall 2006, is interdisciplinary. Students look at how cultural and artistic processes have brought people together over time and how politics, disease and environmental damage have divided them. They also learn why sociocultural, political, economic, ecological, demographic and biomedical movements are converging toward globalization.

The program prepares students to become the global thinkers and problem-solvers of the 21st century, from public policy to public service, from media to medicine to management.

The global studies program offers students a chance to transcend borders from a classroom, UCR Extension’s International Education Programs brings students across borders to meet face to face.

Interim Dean Sheila Dwight oversees the International Education Program. Last year, more than 3,000 students from 47 countries came to Riverside through IEP to take advantage of its many offerings — from learning English to cross-cultural communication.

Most of the students stay with local families that have children. They quickly develop lasting relationships with the students. Dwight likes to tell of a now-grown child from a former-home-stay host family who stopped by her office recently with photos she’d taken in Japan at the wedding of the former visiting Japanese student.

“It’s this kind of experience that helps to internationalize our community,” she said. “Students come here thinking they’re just going to study English,” Dwight said. “But they quickly learn about American culture — and other cultures, as well.”

Recently, a visiting student from Greece announced that he needed to transfer out of class because it put him in close contact with a Turkish student. Dwight persuaded him to stay in the class and was pleased to learn that within a week, the two students had become fast friends.

“People tend to leave their prejudices behind when they’re out of the milieu that fostered them,” Dwight says.

The program also brings foreign students to local elementary school cultural-exchange programs. The program is in its fourth year of a contract with local schools to help non-English-speaking mothers better communicate with their children’s teachers. Meanwhile, IEP practices what it preaches. The program itself has become a microcosm of its participants — its staff members hail from Turkey, Japan, Korea, Brazil, Argentina, Cambodia and other countries.
Evolving Education:
How can a system of public education designed for the 19th century be brought up to 21st century standards?

By Ricardo Duran

The debate education of the past five years has focused on leaving no child behind, but those who look beyond the horizon see the world getting flat. New York Times columnist Thomas Friedman’s 2005 book “The World is Flat,” says the forces that ensured America’s educational supremacy for most of the 20th century have shifted.

Slip Sliding Away
This realization has spawned a blizzard of government white papers, private foundation and media reports pointing out education’s shortcomings in preparing today’s students for the future. Meanwhile, nations from tiny Singapore to the Chinese and Indian economic behemoths are rapidly overtaking U.S. educational standards.

In December, the New Commission on the Skills of the American Workforce called for a top-to-bottom overhaul of U.S. education to help Americans compete in a global marketplace. Funded by such influential private players as the Bill and Melinda Gates Foundation, the Lumina Foundation, the Annie E. Casey Foundation and the William and Flora Hewlett Foundation, the commission’s ranks include current and former local, state and federal education leaders, industry CEOs and trade and labor leaders. Their December 2006 report, Tough Choices or Tough Times, made sweeping recommendations such as instituting high school board exams for all 10th graders, diverting most to community college while retaining high-scorers for preparation to admissions at selective colleges; recruiting better students as teachers; funding schools at the state level to pump more money where needs are greatest; and supporting lifelong education to keep workers at the cutting edge.

The single greatest factor in improving student performance, most say, is the quality of teachers.

So What Can Higher Education Do?
Action at UCR means sending scientists and scholars to the K-12 schools, placing students in classrooms and actively recruiting its promising mathematics, science and engineering students — areas of critical need according to the state of California — to become teachers.

“As a mathematics educator, I have always felt that one of the primary reasons we teach and learn mathematics is to expand students’ capacity to think creatively and analytically” said Assistant Vice Provost for Academic Outreach and Educational Partnerships Pamela Cruz. “The study of mathematics teaches critical thinking skills, which are used to manage and process information, and assess it for accuracy.”

Finding the Teacher in Students
Bradley Hyman, a biology professor, is helping lead the way at UCR by attracting strong students in the College of Natural and Agricultural Sciences and the Bourns College of Engineering to a career path they may not have considered — teaching.

At the Science and Mathematics Initiative (SMI), where Hyman is co-director with Leslie Bushong, students can work toward their bachelor’s degree in science, engineering and mathematics while preparing to pursue a teaching credential.

Started and funded largely by the California Governor’s Office of the UC Office of the President, the initiative seeks to identify future science teachers, and beyond graduation to form a supportive environment that follows them through credentialing into their working lives.

“We’ve developed a community college residency program in which students get actual (K-12) classroom experience even before they arrive at our doors,” said Edey, now the director of the Copernicus Project.

A summer science institute gives new teachers opportunities to hone their science and teaching skills. In May, they’ll hold a conference for college students, high school juniors and seniors and their parents to exchange information about the teaching profession for those interested in science-related careers. Summer institutes cover topics such as invasive-species management using natural enemies, solar cell fabrication using plant dyes to convert sunlight into electricity, and water quality and treatment methods.

Even without global pressures, the need is great, according to the National Science Foundation, which predicts that the nation’s school districts will need to hire 240,000 new middle- and high-school science and mathematics teachers by 2012.

Improving the Teachers We Already Have
Katherine Gonzalez, a fourth- and fifth-grade science teacher for 19 years, always enjoyed math and science but didn’t graduate with a science degree, a shortcoming in her line of work. So when she heard of a weeklong summer workshop at El Camino Elementary School in the Jurupa area, just west of the city of Riverside, she jumped at it.

On a triple-digit July afternoon, she supervised four boys as they measured the slope and angle of the ramp determined its rate of travel.

Gonzalez was one of a dozen teachers and 65 students participating in ALIAS (Accelerating Literacy Integrating Algebra and Science), one of a handful of programs under the umbrella of Mathematical ACTS at UCR, funded by a $5.2 million grant from the National Science Foundation. The program injects fun and hands-on lessons to students and their teachers to help raise California’s mathematics and science achievement.

“Kids are natural scientists,” said Richard Cardullo, a professor of biology at UCR and the principal investigator for Mathematical ACTS. “They like to ask questions of the world around them and play around to figure things out.”

Meeting Tomorrow’s Challenges
A century ago, the United States led the world in the vertical integration of corporations, where companies performed every function necessary to get their products to market. Today, the country is once again a leader, this time in deconstructing vertical integration through outsourcing.

But the trend is moving beyond simply finding cheaper labor and toward complete automation of some white-collar tasks, according to the New Commission on the Skills of the American Workforce. As the cost of labor rises and the cost of automating falls, it becomes both possible and necessary for firms to cut jobs.

First to go were low-skill manufacturing jobs, but now the most vulnerable are those involving routine white-collar tasks.

“This is a world in which a very high level of preparation in reading, writing, speaking, mathematics, science, literature, history and the arts will be an indispensable foundation for everything that comes after that for most members of the work force,” the commission report said.
A Passage Through the Pages

The written word has often been used to take readers on literary journeys that allow them to cross borders and transcend the boundaries of everyday life.

Such is the case with this issue’s Page Turners.

“Inlandia” celebrates and explores the area otherwise known as the Inland Empire. As one of the fastest-growing regions in America, the area is quickly becoming much more than just the area east of Los Angeles.

“Inlandia” – a term coined by Juan Felipe Herrera, holder of the Tomas Rivera Endowed Chair at UCR – is the study of the identity and artistic recognition, and of a land that is becoming both more prosperous and endangered.

The area consists of Riverside and San Bernardino counties, and is also known as the Inland Empire. As one of the fastest-growing regions in America, the area is quickly becoming much more than just the area east of Los Angeles.

The journey of “American Cookery: A Novel” starts in Idaho and follows the life of a young woman and her extended, tightly knit Mormon family. More than two-dozen recipes are included in the book.

Start your own journey across borders by taking a look at what these authors have to offer.
Focusing on the northern Maya lowlands, this book presents a cross section of current research projects in the region. Both established and up-and-coming scholars cover key topics with environmental and historical significance, the archaeology of large and small sites, and the development of agriculture, resource management, ancient politics and long-distance interaction among sites.

Boarding School Blues: Revisiting American Indian Educational Experiences
Edited and introduced by Clifford E. Tutzer, UCR professor of history, and Jean A. Keller and Lorene Sisquoc.
University of Nebraska Press September 2006, 274 pages

The first volume of essays to focus on the American Indian boarding school experience, the book is written by some of the foremost experts and most promising young scholars of the subject.

“Boarding School Blues” addresses issues such as sports, runaways, punishment and Christianity.

Tutzer is a professor of American Indian history, director of public history and director of graduate studies at UCR.

Broken Glass: A Family’s Journey Through Mental Illness
By Robert V. Hine, UCR professor emeritus of history.
University of Arizona Press May 2006, 274 pages

When Robert Hine’s daughter, Elene, first showed signs of unhappiness as a little girl, no one dreamed she would grow up to have a serious personality disorder. In this book, Hine shares the story of his family’s struggle to keep Elene on track and functional, to see her through her troubles with delusions and medication, and eventually to help her raise her own children.

Enrique Granados: Poet of the Piano
By Walter Aaron Clark, UCR professor and chair of music.
Oxford University Press November 2005, 304 pages

Enrique Granados (1867-1916) was among the leading pianists of his time. His eloquence at the keyboard inspired critics to dub him the “poet of the piano.” In this book, Clark offers a substantive study in English of this virtuoso pianist, composer and music pedagogue. Drawing on newly discovered documents, Clark explores the cultural spheres in which Granados moved, particularly of Castile and Catalonia.

Chaos and Cosmos: On the Image in Aesthetics and Art History
By Karen Lang (’82, ’87 M.A.).
Cornell University Press October 2006, 304 pages

“Chaos and Cosmos” explores the period from the 1880s to 1940, the intellectual and cultural early years of academic art history in Germany. Extensively illustrated with works of art from the Enlightenment to the present day, this book illuminates an intellectual legacy that has shaped the study of the history of art.

Glamour Addiction: Inside the American Ballroom Dance Industry
By Juliet McMains (’03 Ph.D.).
Wesleyan University Press January 2007, 264 pages

In the wake of the television success of “Dancing with the Stars,” competitive ballroom dance has experienced new fascination and renewed scrutiny. Putting ballroom dance in the larger contexts of culture and history, “Glamour Addiction” makes a contribution to dance studies while giving new and veteran enthusiasts a unique glimpse behind the scenes.

Also published:

City of Cathears: The History of Jazz in St. Louis, 1885-1973
By Dennis Oakey (’65, ’69 Ph.D.).
Ready Press September 2006, 208 pages

The Tellemachia: A History by Antimnes of Ages
By Michael Barnes Salvin (’69)
Lulu Press 2006, 575 pages

Distant Voices: Women in United States History
by Emily M. Tupé (’97 Ph.D.).
CAT Publishing February 2006, 458 pages

Great Stagecoach Robberies of the Old West
By R. Michael Wilson (’00)
CAT Publishing November 2006, 200 pages

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The fetid odor of rotting avocados fills the bedroom of a small white stucco and brick house in San Pedro Las Huertas, in central Guatemala. The room, a makeshift laboratory, is crammed with tables, a microscope and 15 large white plastic and mesh dome cages, some of which rest on the guest beds. In each cage, a large pile of once-healthy avocados (collected from wild avocado trees from the cities of Alotenango, Antigua, Coban, Iztapa, Santiago Atitlan and Sumpango) sits in varying stages of decomposition.

UCR entomologist and researcher Mark Hoddle, his nose and mouth protected with a white mask to fend off the olfactory assault that has pushed the air from the small room, sits in front of the greenish-gray mounds of decay in the cages. He ponders the entomological who-done-it before him as he prepares to crack open and examine decaying fruit. He is looking for the insect pests feeding inside.

A man fascinated by insects since his boyhood in New Zealand, Hoddle opens the nearest cage and grabs one of the liquefying globs. Carefully, he inspects it for clues to the identity of the culprit that could be living inside.

He focuses his eyes past the mold and bacterial colonies feasting on the surface of the avocado and probes deeper for tell-tale signs of what is destroying the fruit from the inside out.

Finally, he finds what he’s looking for. “Caterpillar poop,” he says half-smiling. “This is a keeper!”

The villain? Stenoma – a pale beige moth whose larvae feed on the seed and pulp of the fruit of the avocado tree. Native to Mexico, Central America and South America, the avocado is the only member of the laurel family that produces fruit edible to humans. The Aztecs called it “ahuacuatl” – the testicle tree – because of the way the fruit grows in clusters on its branches. They hid their maidens during harvesting season because they believed it had aphrodisiacal properties.

The first recorded planting of an avocado tree in California was sometime before 1856 in San Gabriel. By 1908, railroad magnate Henry E. Huntington, who had the chef at his downtown club save seeds for him, planted the first commercial avocado orchard in San Marino.

The market for avocados grew rapidly. Just seven years later, there were enough commercial avocado growers in the state to lobby for a quarantine on competing Mexican and Guatemalan avocados to prevent “the introduction of seed weevils, stem borers and other pests.”

The quarantine against imports of foreign avocados lasted 83 years. During that time, no fruit-feeding avocado pests from Mexico and Central America established themselves in California orchards.

Then in 1997 the U.S. Department of Agriculture (USDA) – some say to satisfy requirements imposed by the North American Fair Trade Agreement (NAFTA) – partially lifted the ban to allow Hass avocados from “certified pest free zones” in Mexico into the United States.

In the first phase, avocado fruit imports were allowed in only 13 non-avocado growing states, mainly in the northeast section of the country. Later, imports were authorized in all but the three avocado-producing states, California, Florida and Hawaii, which lobbied heavily to keep imports out. This year, the three remaining states reluctantly joined the fold.

USDA officials are sensitive on the subject of how much influence NAFTA had in lifting the ban. They maintain that talks aimed at easing restrictions began years before the agreement entered into force.

They come into this country illegally, riding on fruits and vegetables. They can cause economic and environmental damage. Entomologist Mark Hoddle’s job is to stop them in their tracks. He is part of UCR’s CSI Team (Controlling Sinister Insects)
imports could spell trouble because of the huge volume of fruit that will be coming into California, and what he calls “the impossibility that all pests have been effectively excluded in the country of origin.”

“I don’t think anyone from the USDA goes to these countries for an extended period of time to do the kind of analysis we are doing in Central America,” says Hoddle. “We’ve cracked open almost 4,500 avocados looking for pests that feed on the fruit.”

travel after sunset should be avoided. Travelers should exercise extra caution on the roads in rural areas.”

“Violence and robberies are a big issue every day in Guatemala,” Hoddle says matter-of-factly. On one field trip, in the course of gathering specimens near an avocado orchard, armed men guarded the orchard informed him that they had chased three avocado thieves the previous night, corralled them against the gate and “blasted them with shotguns.”

“They said the bodies of the three people they’d shot were taken to the local hospital and the police informed that it was a rabbit hunting accident,” he recalls. In addition, there are also daunting natural obstacles.

“We’ve had to drive through rivers so deep that the water comes up to the doors of the car and bow waves wash over the hood. Some of the roads are so bad that once you’re committed, you have to keep going; you will either drive out or get stuck in the mud, or the bottom of the car will get hung up on a large rock or center ridge.” So why does he do it? Every month new insects immigrate to California, arriving in the cargo holds of ships and airplanes, in car trunks and truck trailers and on fruit in the lunches of people entering the United States from countries north, south, east and west. Any one of these insects has the potential to ruin crops. Because of this, an average of six new pest species establish themselves in California each year. Some of these pests cause severe economic and environmental damage to the state.

Insect Forensics

Search for Evidence

The research Hoddle is conducting is the intentional use of host specific chemicals used in communication between members of the same species. They’re used by everything from ants to humans. There are alarm pheromones, aggression pheromones and sex pheromones. The sex pheromones act as a chemical perfume that lets males know there’s a good time to be had close by. Millar will extract a sample of the sex pheromone from Stenoma females and put it in a machine that will analyze its chemical make up. He will then use this analysis to create a synthesized version of the pheromone that will be placed on traps to attract and kill any males unfortunate to be living in a California avocado orchard – all this without the use of environmentally unfriendly chemicals.

A Century of Sleuthing

Hoddle and Millar are just two in a long line of UCR scientists whose work has provided protection for California farmers and their crops for more than 100 years. On Feb. 14, 1907, what was then called the Citrus Experiment Station opened its doors in Riverside at the request of local citrus growers who wanted more effective ways to protect their crops from diseases and pests.

The station, which provided the impetus for the creation of UCR in 1954, is now called the Citrus Research Center-Agricultural Experiment Station. In the intervening century its mission has expanded to include the protection of other crops, the development of new species of fruits and vegetables, and the search for environmentally safe ways to combat plant diseases and pests.

Citrus station scientist Harry Scott Smith, who later became one of UCR’s founding professors, was the first to use the term biological control in 1919 at a meeting at the Mission Inn in downtown Riverside. Four years later he and four colleagues formed the Division of Beneficial Insect Investigation, the world’s first academic department devoted to the science of biological control.

In the 1920s, station scientists stopped the citrophilus mealybug, a major citrus pest, with a parasitic insect imported from Australia. In the 1940s, station researchers halted the spread of tristeza disease, which threatened to wipe out the state’s citrus industry, by developing a new disease-resistant rootstock.

More recently, UCR entomologists have developed biological controls to stop pests like the glassy-winged sharp shooter from destroying the state’s vineyards and almond orchards, and saved its avocado orchards from the ravages of the red-banded whitefly, the avocado thrips and the persea mite. Each new advance is the result of painstaking detective work and science. Back in Guatemala, Mark Hoddle’s crime scene investigation of potential threats to U.S. avocados continues. He and his wife, Christina, will spend countless hours gathering more specimens in their rigorous pursuit of avocado pests and the biological control agents that might be useful in controlling them.

While the solution to a potential Stenoma moth attack may lie in pheromone-laced traps, Hoddle and his team know that they will need an arsenal of weapons, each designed to fend off a specific predator.

“The flies and beetles may not have pheromones so we won’t be able to design traps in the same way,” he says. As a back up, “We are hunting for potential natural enemies. We’ve found a number of them and we are well-positioned for a biological control program in case they cross the border and establish damaging populations in California orchards.”
Beyond Borders

Beyond Borders

By Laurie Williams

It took Dan Kish a long time – a big chunk of his childhood and adolescence – to acknowledge that being blind was a fundamental part of who he was.

“It was a considerable struggle,” said Kish (’88), a psychologist who has found success helping other blind people learn to get around independently. “I carry it lightly now, but for years I wouldn’t let the word ‘blind’ be used around me. I was resentful of how other people treated me as less than human. But in the end, I can and keep in touch with my spirituality.”

Executive director of the Southern California-based nonprofit World Access for the Blind, Kish travels the globe teaching echolocation – the ability of humans to sense objects in their environment by hearing echoes bounce back. They get a surprising amount of information that way, Kish said – including locations of walls and doorways, curbs and stairs, and obstacles such as furniture and other people. The technique lets them rely more on their own senses and less on other people’s, he said.

Kish’s goal for each student is a full life, from getting around town to playing team sports and riding bikes. Some of his students have amazed him with their accomplishments.

“One is a boy named Daniel I worked with in Mexico,” Kish said. “He’s 13 now. He was 6 when he became blind – hit by a truck while riding his bike.”

Daniel was badly injured, and doctors thought he might never walk again, but, Kish said, except for his vision, he has made a full recovery.

“He had become hard and angry, but in the work we did he was able to begin playing soccer again, able to regain his self-respect and standing in the community,” Kish said. “Now he plays soccer with his sighted peers and is at the top of his class in school. It was amazing how well he responded – even having been so badly hurt, having been so angry, he saw what was good for him and was able to take it in and make it part of himself.”

The first blind person certificated on a national level to teach orientation and mobility, Kish has been widely featured in the media and is in worldwide demand as a speaker. He has written extensively, teaches students individually and in groups, and continues to lead other blind people on such expeditions as mountain hiking tours and hikes in the wilderness.

Blind people have used echolocation for centuries but Kish has expanded on the technique in order to challenge the limitations a sighted society places on people who can’t see. His work demands most of his time and that’s the way he likes it.

“I’m really a 24/7 kind of person – talk about someone who takes his work seriously. I don’t have a specific process . . . I don’t have a specific process for decompressing, but I go hiking when I can and keep in touch with my spirituality.”

Kish started his UCR experience in the background I needed in human perception and launched me to where I am now in terms of teaching and helping people.”

Psychology may have lured Kish away from music, but he’s thought about putting together a CD or two to raise money for World Access for the Blind.

“We’re outgrowing our funding,” he said.

To learn more about World Access for the Blind or to donate to the program, visit www.worldaccessfortheblind.org.

A Boom with a View

UCR grad Dan Kish teaches the blind to “see” by sensing echoes that bounce off the objects in their environment.

By Laurie Williams

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To learn more about World Access for the Blind or to donate to the program, visit www.worldaccessfortheblind.org.
Never Give Up
That is the advice that Robert Hine gives to parents who face difficult challenges. He recently wrote “Broken Glass,” a book about the heartbreak – and triumph – of parenting a schizophrenic daughter.

By Robert Hine, UCR professor emeritus of history.

When I was asked to write about life with my daughter, Elene, who at the age of 51 has struggled with mental problems for much of her life, I asked myself if I was qualified to provide insight for other parents.

After all, every parent has a child who is different and most parents have a child who has some real problem, even if it’s only being too short or having severe acne or proving unduly rebellious.

So is there anything I can add to simple sympathy for being a parent, for the rocks in the road, for the task we accepted or were assigned as we added years to our teen ages?

My daughter was a beautiful child, smart (assigned to a gifted, ungraded program after the second grade), talented (she could sight-read Mozart at an incredibly early age and her Chopin could bring tears). Her charcoal drawings rivaled Leonardo (in my eyes).

By her late teens we knew she was more than a gifted child; she had problems but no psychiatrist would diagnose anything serious. Her fears grew enormous, fears of microwave ovens, smoke alarms and an incredible array of technologies. By then she was living in Santa Cruz, a long way from our home in Riverside. She was becoming a frequent patient in the mental ward of the hospital.

My wife and I visited constantly, trying to balance two lives 500 miles apart. At one point she was lost, homeless, wandering somewhere on the streets. It was the early 70s, and the police were helpless before the number of homeless.

My wife and I were distraught, determined to find her and bring her home. We began a long search into every park, street corner or likely neighborhood.

— Robert Hine

I know there are many parents who can’t cope with a mentally disturbed child. They try over and over, but eventually are wrung out and refuse to continue their support. If the child persists in acting strangely, then they cut the ties, forget the past and go on their way. It’s an all-too-frequent response and often seems abundantly justified. “Tough love” is the catch phrase of excuses.

“You look like my dad,” she said. She was ragged, dirty, maybe stoned and altogether pitiful.

“T’ll bet he’d like to see you,” I said. “Don’t you believe it,” she answered promptly. “He doesn’t want to see me. He threw me out.”

There wasn’t much more I could say except “I’m sorry.”

“I know there are many parents who can’t cope with a mentally disturbed child. They try over and over, but eventually are wrung out and refuse to continue their support. If the child persists in acting strangely, then they cut the ties, forget the past and go on their way. It’s an all-too-frequent response and often seems abundantly justified. “Tough love” is the catch phrase of excuses."

“My wife and I were distraught, determined to find her and bring her home. We began a long search into every park, street corner or likely neighborhood."

— Robert Hine

All I can say to such parents is “No. Never give up.” Support is important, not necessarily overt like cash, but just being there, giving the impression that you care, that you want things to be right again.

It’s little enough, but it can make all the difference in the world. For more information about Hine’s book, see the Page Turners section on pages 20-23.
Enhance Your Success ... Join the UCR Alumni Association for Life

'50s

58 Charles D. Field was elected to serve a four-year term on the Western Municipal Water District Board of Directors. He retired in 2004 after 14 years with the Riverside County Superior Court. Since then, he has been working as a mediator with the Inland Valley Arbitration and Mediation Service (IVAMS), an alternative dispute resolution service based in Pomona. He also serves on the boards of the UC Riverside Foundation, the Riverside Philharmonic, the Maloof Foundation, the Riverside Arts Council and the Mission Inn Foundation. Charlie and his wife, Virginia, live in Riverside.

'60s

64 Barbara Buhler Lynes (’64 M.A., ’73 Ph.D.) is senior curator for the Georgia O’Keeffe Museum and the Emily Fisher Landau director for the Georgia O’Keeffe Museum Research Center in New Mexico.

'70s

71 Diane Mindrum is the CEO of Mindrum Precision Inc., a glass and ceramic parts manufacturing company in Rancho Cucamonga. She took over the business from her husband, Paul Mindrum, who started the company in 1956 out of his garage.

'90s

Diane Mindrum

Lloyd Levine (’92)
California State Assembly member District 48

“Most time at UCR was about far more than just my degree. It provided me with the base I needed to go on and win election to the California State Assembly in 2002. Since then, I’ve turned my personal passion for fitness into a crusade to improve the health and well-being of next generation Californians by creating my own fitness challenge for schools. As a proud Highlander and lifetime member of the UCR Alumni Association, I enjoy staying connected to my dynamic alma mater, as well as to those close college friends, mentors and fellow alumni who recognize that winning a lasting victory depends on creating success for others.”

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1958 Robert Gregory Taylor is a retired presiding judge at the Riverside County branch of California Superior Court. He was selected to serve on a five-member committee that has been tasked with examining Riverside County’s elections procedures after a range of glitches and delays cropped up in the November election.

1976 Greg Brown (’76 M.A.) spent six years working at Union and Getty oil after obtaining his master’s degree. He spent the last 23 years at Boeing as manager of market research and since has retired and has gone back to school to study planetary geology. Chuck Libby is an advanced placement and international baccalaureate history teacher at North High School in Riverside. He was one of 15 high school teachers to earn a National Endowment for the Humanities grant to study in Europe this summer. Chuck, who was a medic in Vietnam, focused on medical practices during World War I, including the improvement of medical technology and methods of treating the wounded. He is a two-time recipient of a National Endowment for the Humanities grant.

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**ALUMNI EVENTS**

**UCR Football Alumni Reunion**
Don’t miss this first-ever reunion for players, coaches and friends of the UCR football program. The reunion will be held June 22 and 23. www.alumni.ucr.edu/football

**The Best of the Best**

The UCR Alumni Association will recognize outstanding alumni during the 21st Annual Alumni Awards of Distinction Banquet, 6-9 p.m., April 21 in the University Theatre. Reservations are requested by April 13.

Honorees will include: Edward J. Blakely (’60), Distinguished Alumnus Award; Jean M. Easum (’75), Alumni Service Award; Daniel I. Goldmark (’94), Outstanding Young Alumnus Award; Brian N. Hawley (’89, ’91 M.S.), Honored Alumni Award for the Bourns College of Engineering; Joel R. Reynolds (’70), Honored Alumni Award for the College of Humanities, Arts and Social Sciences; William H. Fenical, (’68 Ph.D.), Honored Alumni Award for the College of Natural and Agricultural Sciences

**Travel with Friends**

Take a trip to Ukraine and Romania in the company of fellow UCR alumni. The tour is scheduled for Aug. 3-16 for $3,999. All prices are per person, double occupancy.

**How to contact the UCR Alumni Association**
(951) UCR-ALUM or (800) 426-ALUM (2586)
ucralum@ucr.edu
www.alumni.ucr.edu

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**UCR Family Barbeque and UCR Baseball Game**
4 p.m. family barbeque at the UCR Sports Complex; 6 p.m. first pitch vs. Cal State Fullerton at UCR Sports Complex; $10 UCRAA members and kids 12 and younger; $15 nonmembers.

**UCR Parents Association Meeting and Luncheon**
9 a.m.-1 p.m. at UCR. The UCR Parent of the Year award will be presented at this annual event. Reservations requested by April 19.

**L.A. Alumni Chapter Annual Hollywood Bowl Event**
Join the Los Angeles Chapter of the UCR Alumni Association at its annual Hollywood Bowl outing featuring “John Williams: Maestro of the Movies” with the Los Angeles Philharmonic, conducted by John Williams. $36 UCRAA members; $41 nonmembers.

For more information about these and other alumni events, visit www.alumni.ucr.edu.
Andrew Leeka
UC Riverside, Bachelor of Science degree in Biology, 1980

Leeka is president and chief executive officer of Good Samaritan Hospital in Los Angeles. The facility has approximately 2,375 employees, handles almost 100,000 outpatient visits and admits 17,000 patients a year.

1. As head of Good Samaritan Hospital, what's the most difficult decision you have made in the past year?
   The community we serve is diverse both culturally and economically. Approximately 90,000 people are homeless in Los Angeles County and 2 million are uninsured. This places a tremendous burden on our emergency department, resulting in a $10 million loss each year. The difficult decision we faced this past year was if and how we would keep our emergency department open. Working with state legislators, we created a new “Districted Hospital Fund” for hospitals throughout California faced with similar challenges.

2. What advice about the hospital work environment would you like to share with newly minted M.D.s?
   “Be Kind To Your Administrator Week.” You went into medicine to uphold the Hippocratic oath while showing compassion for each patient you touch. Even though the government doesn’t always recognize your value in terms of your compensation, the nurses, technicians and administrators working alongside you sure do.

3. If you could build the ideal hospital, what element of success would be at the top of your list?
   An ideal hospital combines elements of safety, efficiency and beauty. A healing environment lifts patients’ spirits, makes them feel secure and allows for privacy during their most trying times.

4. You are an avid cyclist. How does it help you in your day job?
   Cycling clears my head and gives me a great cardiovascular workout. I have brought the same passion for bicycling to the hospital as well. Each year, I host the “Blessing of the Bicycles” as a program coordinator for the Community Reintegration Program at Gateways Satellite in Los Angeles, which provides treatment in lieu of jail time for chronically mentally ill patients.

5. What’s one important life lesson you learned at UCR?
   I was admitted to UCR under the High School University Program, attending senior year in high school and concurrently take a class at UCR. I chose to take calculus from Dr. Chalmers. My high school math teacher not only discouraged me but said I would flunk since I had never taken calculus and was competing against seasoned university students. I took advantage of Dr. Chalmers’ office hours, worked with the TAs on assignments outside the normal course work and really applied myself. They had confidence in me and gave me a chance to succeed. I, too, want to give others a chance even though they may not have all the qualifications or experience. Oh, and upon graduation, I shared the news with my high school math teacher that I earned an A-plus as the top student.
Invest in Their Future ... and Yours!

When you invest in a DEFERRED GIFT ANNUITY through UC Riverside, you are making a genuine difference in the lives of our students as well as a smart investment in your own future. Backed by the assets of the entire UC System, a deferred gift annuity will provide:

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before retiring from the Marine Corps as a colonel. Paul was honored with a Bronze Star, two Purple Hearts and numerous other awards for his actions in combat. He and his wife live in Yucca Valley, Calif., where he served terms as city councilman and mayor.

'03 Eduardo Garcia is the youngest person to serve as mayor of Coachella since the city incorporated in 1946. He previously served as a councilman for the city of Coachella ... James McElvan (M.A., '06 Ph.D.) is a Riverside County sheriff’s administrative lieutenant at the Perris station. James is a 10-year sheriff’s veteran who also has worked for the Orange County Sheriff’s Department ... Bio Shah (Ph.D.) is a Wichita State University assistant professor in biological sciences. She was awarded more than $77,000 by the National Science Foundation to develop a new course called “Learning Plant Molecular Biology Through Research-Oriented Investigations.”

'06 Brian Frazier is a Realtor and first-time buyer specialist with The Frazier Group real estate firm.

Marriages and Births

Randal Bradley ('81) was married Oct. 14 to the former Joanna Enomoto Beardwood. The couple reside in Placentia, Calif.

John Leyman ('90), and his wife, Kelley, announce the birth of their daughter, Jane, born in December 2006. John is government relations director for Horizon Blue Cross Blue Shield of New Jersey.

Takashi Wada ('90) announces the birth of his first child on Dec. 30. Joaquin Michael Hidetsy Wada weighed 8.66 pounds and was 21 inches long at birth. Takashi is the chief public health officer for the city of Pasadena’s Public Health Department.

Ariel Vitali ('94) married Terry Bingham on Sept. 22. He accepted a new position at Texas University Health Science Centers in Lubbock. He will be completing his residency in general psychiatry.

Joanna (Opi) Wagner ('94) and her husband, William, welcomed their first daughter, Lauren Ariel, in July 2006. The family lives in San Francisco.

Amanda (Harvey) Wolf ('96) and her husband, Brian, welcomed a new baby in April 2006 named McKinney Riley. He joins older brother Shaun Curtis, age 4. Amanda is getting ready to return to the classroom as a high school English teacher after an extended maternity leave. She resides with her family in Orange County, Calif.

Greg Bredebeck, 44, associate professor of English and chair of the minor in gay, lesbian, bisexual and transgender studies died on Feb. 6. A nationally known teacher of queer studies, and Renaissance literature, Dr. Bredebeck joined UCR’s English department in the fall of 1989. His research areas included examinations of Shakespeare and Milton, as well as E. M. Forster, Oscar Wilde and Frank O’Hara, the sexologists and 1970s disco.

Xiao-Song Lin, 49, UCR professor of mathematics, died on Jan. 14 in Riverside. Dr. Lin was born in China. He received many awards, including the prestigious Sloan Fellowship and was supported continuously by the National Science Foundation. He was recently named Beijing University’s Chang Jiang (Yangtze) Scholar by the Chinese Ministry for Education for 2006-08. He was on the editorial boards of several mathematical journals and was co-editor-in-chief of Communications in Contemporary Mathematics, which he also co-founded.

He is survived by his wife, Jean (Jian-Pin) Hsi, electronic reserve coordinator at UCR Rivera Library; sons Kevin and Vincent; parents, Rui-Zhang Lin and Jing-Jun Pu; and brother Xiao-Jiang Lin of China.

Thomas Thurlow McManus, a retired UCR biochemist, died in December at the age of 71.

Dr. McManus retired in 1980 after working at UCR for 22 years. He also worked for 15 years at Lockheed Corp. in the jet and rocket fuel division.

Dr. McManus was an award-winning photographer who volunteered his time to the California Highway Patrol. His picture of lightning striking the UCR Bell Tower was published in The Press-Enterprise and The Los Angeles Times.

He is survived by his wife, Maria; and children, Michael, Michelle, Kristy, Cindy, Thomas Patrick, Ernesto and Carlos.

Ernest Nicholson died December 2006 in Cypress Gardens. He was 86. Nicholson worked at UCR for 30 years. When he retired, he held the position of Physical Plant superintendent.

Herb Quick, a UCR staff member for 30 years and an adjunct faculty member for the art department, died at the age of 81. Quick had training from the Art Center School in Los Angeles and was a student of Edward Weston, Dorothea Lange, Fred Archer and Ansel Adams. He was one of the few people trusted by Adams to make archival prints of his iconic black-and-white portraits.

He left his estate, including photographs, negatives and books, to the regents of the University of California to be housed at UCR’s California Museum of Photography.
If you ambled past the University Club on a fine summer day in 1989, you might have heard something interesting. Not faculty gossip or the answers to an organic chem test but the bleat and wheeze of an unfamiliar instrument.

You can thank Mike Terry, assistant director of Physical Plant for that memory. He and Chris Hanlon (’76) often played the bagpipes at noon and tied UCR closer to the Scottish Highlands.

Terry started as a student in 1974. He worked on campus to put himself through school and graduated with a bachelor’s degree in human development.

The 30-member Pipe Band, of which Terry is founder and the pipe major, made history when it represented UCR and the women’s basketball team at the NCAA finals in March 2006.

“ESPN, the crowd and even the pep band from the other school were in awe ... it was something they’d not seen before,” notes Terry.

Terry is credited with many pipe-related firsts at UCR, which include establishing the Scottish Arts program offering a B.A. in bagpiping and a B.A. in Scottish drumming.

“We are seeking to attract world-class teaching talent for the program by creating endowed lecture positions in support of these Celtic arts,” says Terry. This, along with two scholarships — one privately funded by Terry — have made Terry the bagpipers’ hero, transporting him and everyone within earshot of its haunting sound to the rolling hills of Riverside.