MESSAGE FROM THE PRESIDENT

As one of Texas’ most successful research universities, UTEP has a key role to play in developing the new technologies—and preparing the next generation of researchers—that will help ensure our state’s competitiveness in the 21st century global and innovation-driven economy. In this issue of UTEP Magazine, we take a look at some of the many exciting UTEP research projects and programs that are helping build a better, brighter future for us all. With an increasingly impressive record of successfully competing for private and public sector grants, UTEP ranks fourth among all Texas public universities in annual federal research expenditures, and is included on the National Science Foundation’s list of the Top 200 research universities in the United States.

UTEP’s strong commitment to increase access to higher education opportunities for residents of the El Paso region has, since 1988, been paired with an equally strong resolve to achieve excellence in academic programs, research, scholarship and creative activity. Such excellence is crucial to our commitment to access because UTEP students have every right to expect a level of quality comparable to that provided their peers in more affluent settings. And the recruitment and retention of faculty with the capacity to provide that level of quality requires a campus climate conducive to achieving the faculty’s own research, creative and scholarly aspirations.

Pursuing both access and excellence, UTEP has achieved remarkable progress toward its goal of becoming a National Research (Tier One) University, a transformation endorsed by the Washington Advisory Group (WAG), which reported to The University of Texas System in 2004 that, “…UTEP can become a Carnegie Doctoral Research Extensive (Tier One) university and receive national recognition as a research capable, urban university in this decade.”

To accelerate UTEP’s progress, the U.T. System and the Texas Legislature have invested nearly $250 million during the past several years in science and engineering research laboratories and equipment on the UTEP campus.

It’s especially gratifying to note that our success in leveraging such investments in capacity-building and greatly increasing our externally funded research portfolio has led to a significant rise in our aspirations and investments in capacity-building and greatly increasing our externally funded research portfolio has led to a significant rise in our aspirations and expectations, and success in competing with major research universities for the highest-level, peer-reviewed research grants from the National Science Foundation, the National Institutes of Health and other federal agencies.

From the initial steps that we took in 1988 to today’s robust activity, UTEP’s transformation into a doctoral/research university has been a team effort. We thank all of the faculty and staff members who write highly competitive proposals—more than 500 of them last year—and Vice President for Research Roberto Osegueda and the members of his team for providing the infrastructure and administrative support essential to the continued growth of our research and technology transfer activity.

We also thank all of you, our UTEP alumni and friends, who continue to support academic and research excellence through private giving. We deeply appreciate your friendship and support.

We can all be very proud of the progress we’ve made, and confident that we now have the momentum to achieve UTEP’s goal of becoming a National Research (Tier One) University.

Diana Natalicio

UTEP President
30 EXPLORE. DISCOVER. INNOVATE. CURE.
UTEP researchers have attracted national recognition for their innovative research initiatives in an array of disciplines. Here, we highlight some of those projects that are helping propel UTEP toward national research (Tier One) status.

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Pull-out poster featuring UTEP’s top research inside!

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TRACKING UTEP’S BRAINSTORM: The combined might of UTEP’s talented scientists, engineers and students is helping the University make great strides toward becoming a national research institution. Reaching that summit takes a community of researchers eager to reach out beyond traditional academic boundaries, a team approach that is reflected in the Chemistry and Computer Science Building now under construction.

Some examples of cross-disciplinary research at UTEP: Chemists and biologists are working with computer scientists and mathematicians to study complex materials and public-health problems, and engineers are working with physicians to build devices and materials to heal the sick and injured.

On the cover are some of the best and brightest minds representing the developing brainstorm of interdisciplinary research at UTEP—clockwise, from top left: Paulo Pinheiro da Silva, Ph.D., assistant professor of computer science; Zacariah L. Hildenbrand, chemistry Ph.D. candidate; Heidi Tabaeza-Jimenez, Ph.D., assistant professor of industrial engineering; Jorge Gardea-Torresdey, Ph.D., chemistry department chair and professor of environmental chemistry; and Stella Quiñones, Ph.D., assistant professor of electrical engineering.
The University of Texas at El Paso was in the national spotlight in March when it hosted a congressional hearing that drew state, national and international legislators and media outlets—including CNN and the Los Angeles Times—to campus.

U.S. Senator John F. Kerry and U.S. Rep. Silvestre Reyes held a “U.S.-Mexico Border Violence” congressional hearing at the University’s Tomás Rivera Conference Center. The public hearing was conducted by the U.S. Senate Foreign Relations Committee, which is chaired by Kerry.

Kerry says the goal of the hearing was to “explore ways in which cooperation between the United States and Mexico can be expanded and strengthened to combat the drug-related violence plaguing the border.”

Among those who testified was Howard Campbell, Ph.D., an anthropology professor at UTEP and author of Drug War Zone: Frontline Dispatches from the Streets of El Paso and Juárez, which will be published in the fall by University of Texas Press.

UTEP President Diana Natalicio said the University was honored to host the Senate committee and that the meeting created a spotlight on issues “of the utmost importance to all El Paso and Juárez residents, whose daily lives are impacted by growing concerns about the safety and security of the U.S.-Mexico border.”

Hosting the high-profile hearing also provided UTEP an opportunity to showcase its numerous outstanding academic and research programs, its diverse faculty expertise and its key role in improving the quality of life in the Paso del Norte region and the nation.

Award-winning journalist and 1987 alumnus Alfredo Corchado returned to the University as a special guest speaker for the UTEP Alumni Association’s annual gala dinner.

Corchado, Mexico City bureau chief for The Dallas Morning News, presented a speech, “Covering the Border Without Being Kidnapped, Jailed or Killed: Mexico Through the Eyes of a Foreign Correspondent.”

During his visit, Corchado also spoke to communications students and the staff of The Prospector student newspaper.

Corchado said his experience as a journalist in Mexico helps bring a matter-of-fact perspective on events affecting the day-to-day lives of Mexicans, such as the violent, escalating territorial battles between the Mexican drug cartels that have caught the attention of the entire world.

“There are a lot of misconceptions about the situation in Mexico, such as the suggestion that the country is a ‘failed state,’” Corchado said. “Mexico is one of the least understood countries to outsiders—this gives me an opportunity to educate people about the situation there.”

The gala dinner was a fundraiser for the UTEP Alumni Association El Paso Chapter Scholarship Fund.
New U.T. System Chancellor Visits UTEP

UTEP President Diana Natalicio and the University community welcomed new University of Texas System Chancellor Francisco C. Cigarroa, M.D., and a delegation of U.T. System officials to campus in late March.

Cigarroa, a nationally renowned pediatric and transplant surgeon, served as president of the U.T. Health Science Center at San Antonio from 2000 until his appointment as chancellor in January. As chancellor, Cigarroa oversees the System’s nine universities and six health institutions.

Cigarroa and the U.T. System delegation were given tours of the campus’ academic and research facilities, including the construction sites of the new Chemistry and Computer Science Building and College of Health Sciences/School of Nursing Building.

Cigarroa also met with the deans of UTEP’s colleges and schools and the Faculty Senate Executive Committee.

Students also spent some time visiting with the chancellor. Cigarroa met with several representatives of student leadership organizations, including the Student Government Association, the InterFraternity Council and peer mentors from the University Career Center.

Record Enrollment Registered

The University of Texas at El Paso continues to gain momentum in providing a quality, affordable education to a growing number of students who turn to UTEP to better their lives and their communities—especially during these challenging economic times.

This semester continues an upward trend in attracting and retaining students at UTEP, with a record spring enrollment of 19,156—an increase of nearly 2 percent over last year.

Enrollment at the doctoral level—a 13 percent increase over last spring—is indicative of the progress UTEP has made in developing relevant Ph.D. programs that provide students opportunities to advance in their careers and at the same time provide the workforce with highly qualified professionals.

UTEP has also been successful in helping students complete their educational aspirations. In 2007-08, UTEP awarded a record number of degrees—2,749 bachelor’s, 745 master’s and 35 doctorates—an 11.3 percent increase over the previous year.

With its ongoing success, UTEP continues to be an outstanding educational value and serves as a catalyst for economic and community development.
El Paso native and UTEP alumnus Sam Donaldson—a longtime veteran of ABC news known for his fearless reporting and straight-shooting commentary—doesn’t often need to be asked for his opinion to voice it, especially when it comes to politics.

This time, however, UTEP Magazine invited Donaldson to take his years of experience as the White House correspondent in the Carter, Reagan and Clinton administrations and offer his insight on the challenges facing President Barack Obama.

Donaldson likens Obama to John F. Kennedy for reinvigorating a nation with his youth, charisma and message of hope. But, he warns, it’ll take a lot more than that to emerge as an effective leader.

His advice: Focus on the economy, lead firmly, be true to yourself—and be “singular,” not “regular.”
by Sam Donaldson

Let me tell you how thrilled I was to see a young, charismatic president take the oath of office, promising a break with the past, and surrounding himself with many experienced people to help him chart a new direction for our country. For a political reporter there is no better time, no better story.

The year was 1961; the president was John F. Kennedy. And it took him quite a while to “learn the ropes” and begin to emerge as a strong and effective leader.

Since then, I’ve seen each president work to make the country better; some have, some haven’t, and for one or two, the pluses and minuses have balanced out.

Here is some advice I would give President Barack Obama.
First, successful presidents usually concentrate their early political capital and energy on one of two big things. We would all like to see health care, Social Security, the entitlement programs, the income tax system and a dozen other matters fixed, reformed and tended to. But it is not possible to move the system in so many directions at once. President Obama, put away your shotgun and put your long rifle to your shoulder and fire away, night and day, in an effort to fix the biggest thing on your plate: the economy and the saving of the livelihood of your 305,000,000 constituents. You can try one more thing if you like (I suppose it’s health care reform), but that’s it!

Second, your call for bipartisanship is admirable. Do continue to reach out to the other side in a genuine effort to include some of their views. But you and your party won the election and until the voters decide otherwise, you must be firm in moving forward with your program. Machiavelli said it is better to be feared than loved. I don’t agree with that, but believe me, it is better to put the ideas you were elected on into practice than dilute them into a tepid gruel in the name of bipartisanship.

Third, remain true to your principles, the ones that the country heard you promise and expects you to keep. You learned a painful lesson early on when it came to the tax problems of some of your nominees and you seemed willing to bend the rules of strict ethical behavior (admirably, you confessed you had “screwed up”). Always remember Shakespeare’s admonition “to thine own self be true,” and you can’t go wrong.

Fourth, and it may seem trivial but it is very important, carry yourself as people expect the President of the United States to carry himself. You have a tendency to want to be seen as just “a regular fellow – a friendly, nice guy.” You are those things but you are now the singular “fellow” that the country looks up to. When you are about to enter a room, we want to snap to attention as a band plays “ruffles and flourishes.” After an announcer says, “Ladies and gentlemen, the President of the United States,” come forward smiling and waving, but do it to the majestic strains of “Hail to the Chief.”

You are the “Chief” now, President Obama. Good luck.

A 1955 Texas Western College (now UTEP) graduate, Sam Donaldson, 74, is a longtime veteran of ABC news. The four-time Emmy Award winner appears as a panelist on ABC’s This Week with George Stephanopoulos. The El Paso-born journalist has served two appointments as chief White House correspondent for ABC News. Donaldson was the recipient of UTEP’s Distinguished Alumni Award in 1976. Established in 2002 in honor of the newsman, UTEP’s Sam Donaldson Center for Communication Studies provides academic enrichment for communication majors.
Historically known for opening doors to underrepresented minorities, The University of Texas at El Paso in 1955 (then Texas Western College) became the first state college in Texas to integrate its undergraduate classes. In 1966 TWC again broke racial barriers when legendary Coach Don “The Bear” Haskins won the NCAA Division I National Basketball Championship by starting, for the first time ever, an all-black lineup. To this day, UTEP remains the only Texas university to have won the men’s NCAA Division I basketball crown.

Today, UTEP continues to blaze trails of opportunity by enrolling more than 20,400 students—the vast majority Hispanic and the first in their families to attend college.

This January, a number of Miners proudly wore their UTEP orange and blue as close to their hearts as they did their red, white and blue when they witnessed history in the making at the inauguration of the nation’s first African-American president in Washington, D.C.

Here, a few of these Miners offer their reflections on President Barack Obama and the future of our nation.

IN THEIR WORDS

“As a Hispanic minority, who is now represented by a minority in the Oval Office, I believe this new presidency creates opportunities and a sense of belief that we, too, can stand up and make a difference in our country… This inauguration represents emancipation from a previous way of life, and a revelation of how America has risen up to face a new generation of change.”

—Eric Palomares, 21; senior, chemistry/psychology; president, National Society of Collegiate Scholars

“Being able to witness history was a dream come true… The atmosphere was electrifying. We were thousands of people hopeful for change. I wanted to come back to El Paso and bring that positive energy and spread it across the community.”

—Nellie Tabarez, 22; junior, social work

“Being in Washington, D.C., to witness the historic inauguration of our 44th president, Barack Obama, was a once-in-a-lifetime opportunity that I wouldn’t have missed for the world. It was so beautiful to see the American people harmoniously gathered together to support our new leader.”

—Danielle Riddick, 20; junior, elementary education; National Society of Collegiate Scholars

“At one moment, I turned around and could see the sea of flags on the mall. There are no words to describe the emotion with that sight… When Barack Obama was declared the 44th President of the United States, people cheered, they cried, they publicly thanked our Creator. The sheer enormity of the masses, without incident, demonstrated the human spirit and the harmony of all people together for a common cause, indicative that our country is truly ready for change.”

—Diane N. De Hoyos, 1994 UTEP graduate Global Commodity Manager/Advertising/Media
“Genius without education is like silver in the mine.”
~Benjamin Franklin

Wise Mr. Franklin said it well: Education is the tool we need to bring our talents to the surface. Since our beginnings as a mining school nearly a century ago, The University of Texas at El Paso has helped some 89,000 Miners earn degrees, tapping a rich vein of success that has endured for generations.

Today, more than 20,000 students are pursuing their dreams of higher education among UTEP’s 200 undergraduate and graduate degree options.

On the following pages we highlight an array of remarkable accomplishments in each college and school—a celebration of Miners who bring pride to the University, and the dedicated leaders, educators and programs that are delivering the tools for success.
Two dozen French foreign exchange students—many of them business majors—are spending the spring 2009 semester at UTEP to prepare themselves for the global economy.

“I want to improve my English and Spanish and to discover the American and Mexican cultures,” says Elisa Bachir–Bey, 20, of Paris. “My Spanish is getting better.”

The French students say that they selected The University of Texas at El Paso for its accreditation and positive word-of-mouth from previous students who studied here.

Although somewhat prepared for their visit, the students agreed that they were surprised at how large the 420-acre campus was and what it offered to students, from on-campus housing to the Union Building, where students can eat and relax, and the athletic facilities.

“There is no campus like this in France,” says 20-year-old Nicolas Mens, who lives in a West Side apartment complex with Bachir–Bey and Maya Nunez Silva, another French student.

“This place is beautiful,” says Romain Vermot-Gaud, 20, of the UTEP campus. He is among the visiting students who live in Miner Village. He said the French students frequent the game rooms at the Union and Miners basketball games.

The exchange students have learned to love the pancakes and fajitas they can find at 24-hour restaurants. On the other hand, they miss the availability of fresh produce.

“Here, every place sells chips, and chips are not good for the shape,” Bachir–Bey says.

UTEP enrolls about 2,260 international students from about 70 foreign countries, says Carol Wenzel, assistant director in the Office of International Programs.
Marketing Student Tackles Music Pirating

Junior marketing major Jonathan Saldivar has spent several months researching piracy, ways to understand it, and to eliminate it. The investigation is not aboard a motorboat along the shores of Somalia, but at his home on his laptop surfing the Web.

He shared his research as part of a UTEP team that discussed Glocal Board Management: Corporate Communication and the Social Web at this spring’s 30th annual Southwest Texas Popular Culture and American Culture Association Conference in Albuquerque.

His project focuses on how record companies are trying to turn the tables on music pirates through “glocal media,” a combination of global and local social medias such as Facebook, MySpace and YouTube.

“It’s all image power. The music companies want to stop piracy by providing a free playlist people can download as a way to promote themselves,” he says.

Saldivar is a leader who knows how to delegate and sees that work gets done, says Brian McNely, UTEP Ph.D. candidate and assistant director of the Rhetoric and Writing Studies Program. He leads the research team.

“He takes pride in his work and extends himself in a professional way beyond the classroom,” McNely says.

A Boost up the Corporate Ladder

Business professionals who want an extra boost to climb the corporate ladder will have two new MBA opportunities this fall from UTEP’s College of Business Administration.

The college has created an International MBA, a full-time program with a nod to global commerce, and an Executive MBA, a concentrated part-time program that fits the schedules of experienced, working managers. International research travel will be part of both programs.

“These courses will bridge the need for management education,” says Laura Uribarri, director of MBA programs.

While there are some small differences, the majority of the curriculum is the same: a combination of accounting, economics and finance, marketing and management, and information and decisions sciences.

The International MBA lasts two years and involves curriculum in English, Spanish and a portion in Chinese. This program, which will include an internship with a multinational corporation, will help students be more culturally aware of the numerous emerging markets around the world.

This 18-month course is aimed at professionals with at least eight years of management experience and a busy schedule.

“It’s a good fit for me,” says Guillermo Barajas, owner of El Paso-based IDEA architectural firm.

Barajas, who has been an architect since the late 1980s and opened his business in 2003, says he wants an MBA to see if it might create other opportunities for him.

Register Now

Mark your calendars to register for the next international or executive MBA programs at UTEP’s College of Business Administration.

- Executive MBA registration deadline: May 31
- Information: 915-747-5379 or www.business.utep.edu/degrees/mba
In an elementary school in rural Bhutan where the sun is the only source of light to study by, Khendum Gyabak is helping to bridge the digital divide between tradition and 21st century technology.

An education graduate student at UTEP, Gyabak last December traveled to Bayta Community Primary School in her home country of Bhutan to work on her thesis, which involved introducing children to digital technology. Her goal was to record an oral history of the community using her laptop, free digital recording software, and the voices of 10 fourth-grade students.

“Stories are passed down orally from one person to another,” she says. “When they die, the history dies with them.”

During her month-long stay, Gyabak worked under unusual conditions. The school had no electricity and the students had never seen a computer. At first she thought the children would be apprehensive, but she was soon amazed by their desire to learn.

“They’re very curious,” she says. “It’s wonderful that they are at that age where they’re like sponges and absorb everything.”

Under Gyabak’s guidance, the students made up a story about their community, incorporating animals and recording it in Dzongkha, their native language.

“The whole idea of this study is to bring the technology to the community,” she says. “It’s more of an involvement process. I told the children, ‘I’m teaching 10 of you, but I want you to teach 10 other children.’”

As part of her trip, the children also received a UTEP backpack full of school supplies courtesy of the College of Education.

Gyabak received her bachelor’s in information technology from the AMA Computer University in the Philippines.

She had never heard of UTEP until a couple of years ago, when her pen pal Heriberto Godina, an associate professor of teacher education at UTEP, encouraged her to pursue a master’s of education at the University.

Gyabak arrived at UTEP in December 2007. She hopes to graduate in May and start on her doctoral degree.

“I believe a little bit in fate,” she says. “I never thought about coming to UTEP and I never expected to get a master’s in education. We’ll see what happens next.”
Teacher Induction

When UTEP graduate Melissa Fino began teaching third grade at Pebble Hills Elementary School in El Paso two years ago, she realized that she still had a lot to learn.

“My first year teaching was a struggle,” she says. “Everything had to be oriented around the Texas Assessment of Knowledge and Skills (TAKS) test. I also had to differentiate my instruction with different tiers of students. It’s not something that you’re really prepared for, and it’s not something that you learn until you’re in the classroom.”

Looking for support from other teachers, Fino enrolled in the El Paso Teacher Residency Induction Program offered by the UTEP College of Education under its Teachers for a New Era initiative. The program’s goal is to help teachers with less than three years experience to develop strong teaching skills and improve student learning.

Established in 2006, the program is funded through a grant from State Farm Insurance, which has awarded $170,000. The grant also has been used to support additional professional development activities, including A Better Beginning Conference, Saturday Solutions Seminars and New Teacher Center Sessions.

To date, 154 novice teachers have participated in the program, which has impacted at least 15,000 students throughout El Paso County. Nearly 20 schools in the El Paso, Ysleta, Socorro and Canutillo independent school districts and La Fe Preparatory School have participated.

The schools received mini-grants to implement mentoring programs and monthly luncheons.

“If a school provides brand new teachers with the support they need to succeed, teachers will hopefully have good student achievement and good scores on the TAKS,” says Michele Levy, Ph.D., Teachers for a New Era induction coordinator.

Lessons in Culture

El Paso High School students got a lesson in Korean culture from two South Korean teachers who visited their classrooms in February.

Rachael Quon and Chris Lee traveled to El Paso as part of the Fulbright American Studies Institute for Korean Secondary School Teachers of English. The visit was made possible by the UTEP Alternative Teacher Certification Program and the Texas International Education Consortium.

During their two-week stay, Quon and Lee observed mentor teachers in their classrooms and at home to learn about American teaching methods, traditions and lifestyles.

In return, Quon and Lee, who teach English as a Second Language in South Korea, gave students a presentation on Korean culture.

“I could see a total difference between classrooms in America and South Korea,” says Quon. “We have a totally different school system and totally different curricula.”

Before coming to El Paso, the teachers spent four weeks in Austin participating in teacher training courses.

In the past eight years, the institute has brought 360 teachers from South Korea to different parts of Texas.

UTEP has been involved with the program since 2006 and has helped find mentors for six South Korean teachers.
If the enthusiasm generated by people who love what they do is contagious, Lawrence Murr, Ph.D., has infected tens of thousands of students and colleagues during the past 45-plus years in classrooms and research labs.

The chairman of UTEP’s Department of Metallurgical and Materials Engineering, Murr has eclectic research interests from ballistics to biomedical manufacturing to creating metals for the perfect “steel” Caribbean drum.

He sees each task as a chance to learn something new, create something useful, and to train the next generation of primary investigators. As he stands in the shadow of his 70th year, he shows no signs of slowing down.

The Institute of Metal Research, Chinese Academy of Sciences noted his body of work recently when it awarded him the prestigious Lee Hsun Research Award for his past accomplishments in the research field of materials science and technology.

Although pleased, he jokes about the honor while sitting in his 2nd floor office in the Metallurgy Building.

“When you stick around long enough, they give you lifetime achievement awards,” he says. “It’s like getting an award for getting older.”

The honor comes with an invitation to lecture at different university campuses around China. He plans to go with his wife of 50 years, Patricia, for several months in the summer of 2010. His topics will range from ballistic research at the sub-atomic level to the mechanics of writing technical papers.

The honor is well deserved, according to colleagues around the country.

Richard Schoephoerster, Ph.D., dean of the College of Engineering, calls Murr a tremendous asset to the University.

“His breadth of knowledge is amazing, and, as you can see by this award and the other numerous lifetime achievement awards he has received, his work is known and respected by scientists around the globe,” Schoephoerster says.

Marc Meyers, Ph.D., professor of material science at The University of California at San Diego, has been a fan of Murr’s research since he was an undergraduate student in Brazil about 34 years ago.

“I admire his determination, his simplicity, and his intelligence,” says Meyers, who worked with Murr at the New Mexico Institute for Mining and Technology in Socorro, N.M., in the 1970s. The pair wrote research papers and organized an international conference that included Soviet scientists during the Cold War. Meyers even based a character in one of his novels on Murr.
**Engineering Personal Success**

Baldo Martinez spent much of the last third of his young life chasing the almighty dollar only to realize that his true contentment would come via a UTEP engineering degree.

The senior metallurgical and material engineering major dropped out of UTEP in the early ’90s and took a series of sales jobs in El Paso and San Antonio—health insurance, automobiles, call centers, fitness club memberships—to pay the bills and support his family. Although he did well—sometimes very well—his success left him empty.

“I started to look for something that would bring me more satisfaction,” he says.

At age 35, he has re-enrolled at UTEP and has used the management skills that he learned on the outside to land several part-time jobs in the College of Engineering. The latest one is as a peer advisor who works to increase the number of undergraduates that get co-op jobs and internships in industry or with research teams within the University.

“When I got back to the university, I knew I wanted to be involved because it’s a lot easier to succeed when you’re connected,” he says. The combination of maturity and people skills serve him well as a mentor to other undergraduates, says Gabby Gandara, director of the Plaza, an informal information center for engineering students.

“The college is lucky to have him,” he says. “It’s not just the work that he does. It’s the caliber of the work.”

**Center of Innovation**

Every point of view is important when tackling a problem, says the man UTEP has tapped to direct the planned El Paso Innovation Center.

Noe Vargas Hernandez, Ph.D., assistant professor of mechanical engineering, will lead the multidisciplinary “clinic” that The University of Texas at El Paso engineering students—and sometimes others—can use to broaden their skills.

Professors from throughout the College of Engineering and other disciplines will mentor students on real-world projects from design through manufacturing. The jobs could come from industry, university research proposals or student competition.

The goal is to provide students and professors with the opportunities and resources to support more complex senior-style projects that give a taste of how industry works.

The $1 million center is expected to break ground in spring 2010.

The center is the reason Hernandez came to UTEP after earning his doctorate at Arizona State University in 2006. In fact, it’s part of his job description.

His academic background, which includes a master’s degree from the University of Leeds in England, and industry experience at maquilas make him an excellent choice to lead this new center, says Carlos Ferregut, Ph.D., associate dean of the College of Engineering.

“His expertise complements the expertise of the majority of the faculty,” he says.

The center will produce better engineers because it will provide students with an opportunity to put lecture hall theory into practice, says Keith Fong, a UTEP alumnus who is a statistical engineer at the Delphi Mexico Technical Center in Juárez, Mexico.

Fong says that many new hires lack the intuition of engineers who cut their teeth taking apart transistor radios or fixing the family car.

“In the process of learning, the richest vein to mine is to try to make theory real,” he says.

**DEAN’S LIST**

Richard T. Schoephoerster
Dean, College of Engineering

**Education:** Ph.D., Mechanical Engineering; M.S., Mechanical Engineering; and B.S., Biomedical Engineering, University of Iowa

**Experience:** Wallace H. Coulter Chair in Biomedical Engineering, Professor and Founding Chair, Department of Biomedical Engineering, Professor and Director, Biomedical Engineering Institute, Florida International University

**Memberships and Awards:** Fellow of the American Institute of Medical and Biological Engineering; Excellence in Research Award, Florida International University; Inaugural Chair, American Heart Association Bioengineering and Biotechnology Study Group

**Leadership philosophy:** To create an environment where faculty and students can achieve their goals, and where our research and education programs are responsive to the needs of our constituents. Our strategic plan centers on four beliefs: Diversity Drives Innovation, Collaboration Creates Opportunities, Research Fuels Preeminence and Balance Secures Sustainability

**Top priorities for your college:** 1) Expand our research infrastructure, including the recruitment of high quality faculty and graduate students, 2) Develop new relationships and renewing old ones, with our alumni and friends of the college, and industry partners; and 3) Create new educational programs, and revamp our current programs, to meet market demands

**What do you most admire about UTEP? Its students?** That we provide an underserved population of students access to an excellent educational opportunity. I very much admire the courage and determination of our students to achieve their dreams. Our students take nothing for granted, and earn every accolade they receive.

**What most colleagues/students do not know about you:** I grew up on a small farm in Iowa on which we raised turkeys….I once lost 50 pounds of weight over a six-month period through a plan I called the 2-D diet: Desire and Discipline. I believe this simple plan has extension to success in all areas of our lives.
Each year, the College of Health Sciences kinesiology department honors two seniors who have excelled academically and in their service to the University and the community.

Cameron Raschke and Justine Logsdon are the recipients of the 2009 Kinesiology Major of the Year award. The department chooses one student from each of the concentrations in exercise science and physical education.

Raschke, 21, was selected under the exercise science concentration for his outstanding service to the University. At 6-foot-4, 315 pounds, the offensive lineman for the UTEP Miners is a standout on the football field and in the classroom. He was one of 14 student-athletes chosen to the Conference USA Football All-Academic Team in 2008.

A native of Kerwill, Texas, Raschke came to UTEP in the fall of 2005 to play football under Coach Mike Price. He hopes to graduate this summer and then enroll in the kinesiology graduate program.

“I love to play football, but I enjoy learning just as much,” he says.

Logsdon uses her love of sports to mentor young children. Born in Huntsville, Ala., Logsdon moved with her military family to Fort Bliss when she was 3 years old.

Today, Logsdon, 21, serves on the Fort Bliss Teen Council. She also coaches a soccer team of 12- to 15-year-olds on post. As an officer in the Kinesiology Club at UTEP, she has helped organize children's sporting events such as the Little Bowl for the pee-wee football league in El Paso.

“I really love teaching sports to kids,” says Logsdon, who will graduate this spring. “I think it’s important because of all of the health issues and the epidemic of kids and obesity.”

Logsdon will receive her award in the physical education concentration from the American Alliance for Health, Physical Education, Recreation and Dance this spring.

Both Raschke and Logsdon will be recognized during the College of Health Sciences pre-commencement events in May.
Building Community Access

Through a series of Community Outreach Programs (CORP), the College of Health Sciences has been working to improve the quality of life in the Paso del Norte region. CORP enables faculty and students to volunteer with various organizations. “These experiences serve as powerful models for our students’ future roles as professionals in our regional community,” says Kathleen A. Curtis, Ph.D., dean of the College of Health Sciences.

This semester, 30 students were certified to provide American Red Cross preparedness training to some 350 area residents, earning the College of Health Sciences the 2008 Partner of the Year Award from the organization’s El Paso chapter.

Social Work Student of the Year

When Juanita Rios lost her job as a sewing supervisor at a jeans-wear factory six years ago at the age of 43, she took the setback as an opportunity to change her life.

A resident of Fabens, Texas, in the outskirts of El Paso, Rios was engulfed with family commitments, choosing to pursue her GED and join the workforce at an early age. With a limited education, she spent 18 years working in the manufacturing company before she was laid off.

Determined to succeed, Rios enrolled at El Paso Community College, her tuition paid for through a North American Free Trade Agreement (NAFTA) retraining program for displaced workers, and earned her associate’s in social work. She later enrolled at UTEP to pursue her bachelor’s in the same field.

“When I see people who are in need or if they seem lost, I ask if I can help,” she says.

For her passion and determination, the 49-year-old mother of two has been named the 2009 El Paso Social Work Student of the Year by the El Paso Chapter of the National Association of Social Workers.

Another UTEP student, Tricia Martinez, was named the 2008 Texas Social Work Student of the Year by the Texas chapter of the association.

Rios will receive her bachelor’s with honors this May. She intends to work for one year before pursuing her master’s of social work at UTEP, a new degree being offered starting in fall 2010.

“I think because of the situation with my job, I was so fortunate to have the opportunity to go to school,” she says. “A lot of co-workers didn’t have the same opportunity.”

Kathleen A. Curtis
Dean, College of Health Sciences

Education: Ph.D., Education, University of California, Los Angeles; M.A., Health Science, San Jose State University, San Jose, Calif.; B.S., Physical Therapy, Northeastern University, Boston, Mass.

Experience: Associate Dean ad Interim and Director, Central California Center for Health and Human Services, California State University, Fresno; Assistant Professor, Professor and Chair, California State University-Fresno, Department of Physical Therapy.

Memberships and Awards: American Physical Therapy Association, American Public Health Association, Honor Society of Phi Kappa Phi; President’s Award of Excellence, California State University, Fresno, 2005; Physical Therapy Faculty Research Award, California Chapter, American Physical Therapy Association, 1996

Leadership philosophy: I believe in collaborating with others and harnessing our collective talents to move toward a unified vision. I value excellence in teaching, interdisciplinary collaboration, strong university-community linkages and regional partnerships.

Top priorities for your college: Establish a Center for Healthy Eating and Active Living and a Disability Studies Institute to centralize our research efforts; raise $10 million to complete the new College of Health Sciences and School of Nursing building and $15 million in endowments for other college priorities.

What do you most admire about UTEP? Its students? UTEP has become an international leader in higher education, and a dynamic research-intensive public university. I admire the incredible talents and perseverance of our students and their leadership to inspire others to follow in their footsteps.

What most colleagues/students do not know about you: I served on the United States Paralympic Team Medical Staff and was a wheelchair basketball official at four Paralympic Games. I raised a golden retriever puppy, Barclay, who successfully became a working service dog.
For more than half his life, Criminal Justice and Political Science Professor Joseph B. Graves has enriched the education of countless UTEP students, many of whom now boast successful careers in law enforcement, corrections and academia.

His former students comprise a “Who’s Who” list of regional public servants that includes Philip Martinez, U.S. District judge, Western District of Texas; Alberto Alvarez, Jr., chief juvenile probation officer; Jaime Esparza, El Paso County district attorney; and Richard Wiles, El Paso County sheriff.

The 84-year-old Graves is celebrating 45 years of a distinguished teaching career at UTEP.

“Throughout my career, I have been blessed with having students who care about society and want to make a contribution by using their minds and their commitment to nurture the minds of others,” he says.

Among his many contributions to the University, Graves was instrumental in establishing UTEP’s criminal justice program in 1973. He served as the program’s founding director for 13 years and as chairman for six years. He is also the principal author and former director of the master’s of public administration program.

“It has been very satisfying for me to see UTEP emerge from the College of Mines and Metallurgy to what I deem a first-tier university,” he says.

“UTEP currently has the faculty that performs the responsibilities of a first-tier university.”

Graves received his bachelor’s of political science in 1948 and his doctor of jurisprudence in 1950 from Vanderbilt University. He earned his master’s of public administration from Harvard in 1955.

A native of El Paso who graduated from Austin High School, Graves has been a member of the UTEP faculty since 1964. Before coming to UTEP, he worked as Director of Home Financing in the Housing and Home Finance Agency under the Eisenhower and Kennedy administrations.

A former pupil, Mario Alfaro, describes Graves as a challenging professor who would interject stories about playing touch football with John and Robert Kennedy into his lectures on constitutional law.

Now a political science lecturer at UTEP, Alfaro credits Graves with inspiring him to pursue his degree at Texas Tech University Law School: “He expected more from us.”

Graves still carries a full class load, teaching 250 students during the spring semester. Retirement is far from sight.

“I take care of my health so that I can continue to teach classes and communicate with the students,” he says.

“As long as I’m able to continue my enthusiasm and my vitality to teach, I don’t want to retire.”
Changing the Face of Journalism

Although Hispanics make up 14 percent of the U.S. population, only 4.4 percent of them account for the nation’s news workforce.

UTEP is out to change that with the help of the John S. and James L. Knight Foundation, which has awarded the University $412,000 to help increase the number of Latinos in newsrooms across the country.

The grant launched Borderzine.com, UTEP’s online bilingual magazine, which serves as an outlet for Latino journalism students to develop the knowledge, skills, and experience they need to become professional journalists.

“Bringing Out the Best

For media advertising senior Jessica Rae Watkins, the Super Bowl is not about touchdowns, interceptions or field goals.

Instead, it’s about the offbeat, million-dollar advertisements that have become a major part of the game.

“For me, the Super Bowl is all about the commercials,” she says. “That’s when the best ones come out.”

Watkins watches for more than entertainment, however. It’s a way to learn beyond the classroom — and an inspiration for her career.

Recently named one of the Most Promising Minority Students in 2009 by the American Advertising Federation, Watkins dreams her commercial will one day be among the most talked about around water coolers across the nation.

The 21-year-old Watkins was selected along with 39 other students from universities across the United States. Her winning application included an essay in which she credits her life in El Paso with helping her understand how to target the Hispanic consumer.

“I used the fact that I’m from El Paso to my advantage because I live and breathe this culture,” says Watkins, who will graduate this spring.
Weary of the rat race and feeling suffocated by their jobs, Trey Schleicher and his wife, Jennifer, needed to make career changes that would impact their lives and the lives of others.

“We were tired of being in an office for eight hours and simply got bored of the business world,” says Jennifer, who holds a bachelor’s in information technology.

The Houston couple, who have been married five years, found an intense interest in the same field: nursing.

“Jen and I began having conversations about what other jobs might be out there that would allow us to be hands on, work with people, possibly be of some help to others and make a difference in their lives and feel a little more fulfilled,” says Trey, who has a bachelor’s degree in economics and finance.

The Schleichers, both 27, looked into accelerated nursing programs throughout Texas and picked the UTEP School of Nursing Accelerated Bachelor of Science in Nursing Program, known as the Fast Track Program.

“UTEP was the friendliest university and made it really easy for us to apply,” Trey says.

To enroll, students must meet the Texas Core requirements, prerequisites and have an associate, bachelor’s or a post-graduate degree from an accredited institution.

“We knew that we were going to have to sacrifice a lot of things for 15 months,” says Jennifer, who along with Trey will graduate this summer. “But being able to stay together has made it all much easier.”

Now in its fourth year, the program has been recently modified from a 15- to a 12-month program as a way to reduce the region’s alarming nursing shortage. In Texas, about 20,000 nursing jobs went unfilled in 2007. That number is expected to rise to more than 70,000 by 2020.

“The seriousness of the nursing shortage is unparalleled in the history of our nation,” says School of Nursing Dean Robert L. Anders, Dr. PH. “UTEP is working to meet these increasing demands as well as to provide the highest quality of care possible.”
Equalizing Border Health

Being a culturally competent nurse is not just about speaking the language patients feel most comfortable using. It is being knowledgeable about and sensitive to cultural traditions and lifestyles that may impact patients’ health.

Assistant Professor of Nursing Kathleen O’Connor came to UTEP in fall 2008 to teach future nurses to be aware of their patients’ cultural differences, a subject she believes “can mean life or death in a clinical setting.”

Outside of the classroom, O’Connor, who earned her doctorate in anthropology from Harvard University, also is working on various research projects related to mental health and health disparities.

Among them is her study, Women in Danger: Drug Wars, PTSD and Low-Income Latinas at the U.S.-Mexico Border, which evaluates the mental health of women living in colonias, or low-income neighborhoods that often lack basic utilities, paved roads, and safe and sanitary housing.

“The specific aim is to assess mental health among low-income Hispanic women who are exposed daily to the trauma of violence relating to conflict between narco-traffickers, police and military forces,” she says.

With this study, O’Connor hopes to add to the public health literature on the mental health effects of social unrest. This will help caregivers understand fully the social, economic and health-related costs of violence, she says.

In another study, O’Connor has been analyzing data from the Binational Health Survey of two colonias in the El Paso-Juárez region, one of many projects sponsored by the UTEP Hispanic Health Disparities Research Center.

She also is a co-investigator in a third research project, Prevalence of Post Traumatic Stress Disorder and Depression among Military Health Care Providers; School of Nursing Dean Robert L. Anders, Dr. PH., serves as the principal investigator.

“Our aim is to investigate PTSD and depression in U.S. Army medical personnel who have been deployed to Iraq or Afghanistan, to describe the experiences of a subset of deployed soldiers,” Anders says. “The study also will document the mental health needs of participants and the availability and accessibility of services.”

Bridging the Region’s Nursing Needs

When Luisa Mendoza graduated with a degree in nursing in Mexico in 2001, she never imagined that one day she would work as an orthopedics nurse at Del Sol Medical Center.

She is one of the success stories to come out of UTEP’s Mexican Bridge Nurse Program, which helps prepare students who already have earned a nursing degree in Mexico to take the National Council Licensure Examination and to take an English proficiency test.

The second group of students began their 16-week course through University College Professional and Public Programs at the end of February. Students learn about the competencies needed to perform as a newly licensed, entry-level nurse on Fridays and then take classes to help them to read, write, listen and speak English on Saturdays and Sundays.

“The program was very well organized, I was presented with all the tools that I needed to pass the licensing exam,” the 36-year-old says. “It was an amazing opportunity.”

The bridge program was started by a grant from the Hospital Corporation of America, the parent group to Del Sol. HCA and UTEP worked together on the curriculum.
The National Science Foundation has approved more than $2.2 million for UTEP to fund geological research that involves explosions in Wyoming, earthquake faults in California and cycling mineral isotopes in Texas. The grants are a testament to the quality of geology department faculty, says chair Aaron Velasco, Ph.D.

“Our faculty members are top-notch leaders in their fields, which is why UTEP is a dynamic place to learn geology,” he says.

David Borrok

Assistant professor David Borrok, who specializes in geochemistry and geomicrobiology, earned three NSF grants worth almost $900,000. The primary grant of $524,000 will fund the purchase of a multi-collector spectrometer, a machine that precisely measures isotopes, which are like the fingerprints of an element. The machine, the centerpiece of the University’s new Center for Earth and Environmental Isotope Research, will be the only one of its kind within a 500-mile radius.

“This is a wonderful collaborative opportunity for UTEP,” says Borrok.

Parts of his other two NSF grants—a study of how copper, iron and zinc change as they cycle through the environment and how those elements may contaminate waterways—will help pay for analytical use of the machine.

Kate Miller

Professor Kate Miller will use nearly $580,000 over the next three years to plan a collaborative study of how the Bighorn Mountains in Wyoming were formed more than 60 million years ago—and detonate 15,000 pounds of explosives in the process.

A team of graduate students, undergrads and her co-primary investigator Steve Harder will bury the charges 150 feet deep at nine different sites around the mountain range before setting them off during the summer of 2010.

“We’re going to be incredibly careful,” she says, later playfully mentioning the department’s motto: “UTEP geophysics: It’s a blast.”

Miller is working with colleagues from three universities in Colorado on this research under the EarthScope project, a collaborative Earth science program that studies the structure and evolution of the North American continent, as well as the processes that generate earthquakes and volcanoes.
Her research will shed some light on how other ranges such as the Rockies and the Franklins were created. Her team will set up 1,600 Texan seismographs, which Miller helped develop in 1998, to record the disturbances created by the explosions.

Bridget Smith-Konter

Assistant professor Bridget Smith-Konter earned the foundation's career grant, which supports junior faculty "who exemplify the role of teacher-scholars through outstanding research, excellent education and integration of education and research."

She will use her $501,000 grant to create interactive kiosks with computer displays to develop interest in Earth science, especially among young students.

The grant also will be used to input new global positioning system data and other research that spans several thousand years of land movement into a computer model that she developed. The data could help scientists better forecast when future earthquakes might hit based on the sequence of past temblors. The work also will be done in conjunction with EarthScope.

The NSF also approved a $230,000 proposal for Smith-Konter to study the vertical motions of the Earth’s crust along the San Andreas Fault with help from 20 tide gauges along the California coast and other data.

"It’s an interesting problem," she says. “No one has ever done it.”

Bridget Smith-Konter, Ph.D.

Assistant Professor

Dean’s List

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Bridget Smith-Konter

Assistant Professor

Bridget Smith-Konter, Ph.D.

Anny Morrobel-Sosa

Dean, College of Science

Education: Ph.D, Physical Chemistry, University of Southern California; M.S., Chemistry, State University of New York at Stony Brook; B.S., Physics and Chemistry, University of Puerto Rico-Rio Piedras

Experience: Dean, Allen E. Paulson College of Science and Technology, Georgia Southern; President/Founder, The Micela Group, developer of women and minority students and faculty in science and engineering

Memberships and Awards: Steering Committee, Campus Women Lead, American Association of Colleges and Universities; the American Conference of Academic Deans, and Council of Colleges of Arts and Science; American Council on Education Fellow

Leadership philosophy: Visionary, creative, clear, consistent, fair and decisive. I am committed to leading with integrity, honesty and shared governance and responsibility.

Top priorities for your college: Recruit and retain high-caliber teacher-scholars and secure the external funds through competitive grants and donors to affirm UTEP as a distinctive and nationally recognized research university.

What do you most admire about UTEP? UTEP has shown that it can deliver academic rigor and research excellence in a region with limited economic and educational opportunities. Its students? I admire their commitment, enthusiasm and tenacity, and that of their families.

What most colleagues/students do not know about you: I breed and show Golden Retrievers, and enjoy sunsets by the sea.

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What most colleagues/students do not know about you: I breed and show Golden Retrievers, and enjoy sunsets by the sea.
The University of Texas at El Paso has reached another milestone on the road to national research university status by breaking ground for a state-of-the-art Chemistry and Computer Science Building.

In March, UTEP President Diana Natalicio and the University community welcomed University friends and supporters to a special groundbreaking ceremony celebrating the construction of the building, which will offer enormous academic and research opportunities when completed.

“The Chemistry and Computer Science Building will be a center for interdisciplinary research projects with the potential to spark new ideas, new technologies, new businesses, and new careers for our students,” Natalicio says. “This is indeed a great day for UTEP and for the El Paso region we serve.”

The $70 million, 140,000-square-foot facility is scheduled for completion in 2011. It will feature advanced laboratories for interdisciplinary research and upgraded classrooms to prepare students for cutting-edge careers in fields such as computational chemistry, computational science, bioinformatics and nanotechnology.

By opening the doors to new opportunities for discovery, the building is expected to significantly boost UTEP’s expanding research capacity. UTEP currently spends more than $50 million a year on research, and is aiming to double that figure in pursuit of national research, or Tier One, status. UTEP has been designated as one of seven “Emerging Tier One” universities in Texas by the Texas Higher Education Coordinating Board.

Natalicio say increasing research activity will “bring enormous economic benefits to the region,” estimating that $100 million in annual research spending will create more than 3,500 jobs and generate about $86 million in wages, salaries and benefits.

Additionally, she said, the status could translate into $135 million in local sales and $5 million in additional revenue for the State of Texas.

The funding for the building was provided in part by a $124 million allocation from The University of Texas System Board of Regents—the largest single construction investment in UTEP’s history.

As UTEP takes its research capacity to the next level, it further strengthens the University’s mission of educating talented students and preparing them for rewarding careers. Through new academic programs, research and state-of-the-art infrastructure, UTEP students are poised to succeed in the 21st century.
Numerous degree programs are in development, including the following, which have been presented to The University of Texas System:

- Doctor of Nursing Practice (DNP)
- Doctor of Physical Therapy (DPT)
- Doctor of Public Administration
- Ph.D. in Ecology and Evolutionary Biology
- Ph.D. in Transnational Society, Culture, and Politics
- Ph.D. in Biomedical Engineering
- Ph.D. in Manufacturing Engineering
- M.S. in Systems Engineering

Estimated implementation for these programs is August 2009 to August 2010.

DOCTORAL PROGRAMS

- Doctor of Education (EdD)
  - Educational Leadership and Administration
- Doctor of Philosophy (PhD)
  - Biological Sciences
  - Chemistry
  - Civil Engineering
  - Computational Science
  - Computer Science
  - Electrical and Computer Engineering
  - Environmental Science and Engineering
  - Geological Sciences
  - History
  - Interdisciplinary Health Sciences
  - International Business
  - Materials Science and Engineering
  - Psychology
  - Rhetoric and Composition
  - Teaching, Learning and Culture

MASTER’S PROGRAMS

- Master of Arts in Teaching Science (MATS)
- Master of Business Administration (MBA)
- Master of Education (MED)
  - Educational Administration
  - Educational Diagnostian
  - Guidance and Counseling
  - Instructional Specialist
  - Reading Education
  - Special Education
- Master of Engineering in Environmental Engineering (MEENE)
- Master of Fine Arts (MFA)
  - Creative Writing
- Master of Information Technology (MIT)
- Master of Music (MM)
  - Music Education
  - Performance
- Master of Occupational Therapy (MOT)
- Master in Physical Therapy (MPT)
- Master in Public Administration (MPA)
- Master of Public Health (MPH)
- Master of Science (MS)
  - Bioinformatics
  - Biological Sciences
  - Chemistry
  - Civil Engineering
  - Computational Science
  - Computer Engineering
  - Computer Science
  - Economics
  - Electrical Engineering
  - Engineering
  - Environmental Science
  - Geological Sciences
  - Geophysics
  - Industrial Engineering
  - Intelligence and National Security
  - Kinesiology
  - Manufacturing Engineering
  - Mathematics
  - Mechanical Engineering
  - Metallurgical and Materials Engineering
  - Physics
  - Speech-Language Pathology
  - Statistics
- Master of Science in Environmental Engineering (MSENE)
- Master of Science in Interdisciplinary Studies (MSIS)
- Master of Science in Nursing (MSN)
  - Nurse Clinical Specialist
    (with a concentration in education)
  - Nurse Practitioner
- Nursing Systems Management

COMBINED PROGRAMS

- BBA/Macc Bachelor of Business Administration (Acct.) / Master of Accountancy
- BBA/MBA Bachelor of Business Administration (Acct.) / Master of Business Administration (Acct.)
- MBA/MPA Master of Business Administration / Master of Public Administration

ONLINE PROGRAMS

- Master of Fine Arts – Creative Writing
- Master of Science in Kinesiology/UT Telecampus

COOPERATIVE PROGRAMS

- UTEP/UT Austin Cooperative Pharmacy Program
- UTEP/UT Houston Health Science Center
  - Ph.D. in Nursing

Coming Soon

Projects for programs that are in development, including the following, which have been presented to The University of Texas System:

- Doctor of Nursing Practice (DNP)
- Doctor of Physical Therapy (DPT)
- Doctor of Public Administration
- Ph.D. in Ecology and Evolutionary Biology
- Ph.D. in Transnational Society, Culture, and Politics
- Ph.D. in Biomedical Engineering
- Ph.D. in Manufacturing Engineering
- M.S. in Systems Engineering

Estimated implementation for these programs is August 2009 to August 2010.
Preserving the Environment

The 372-acre Rio Bosque Wetlands Park is Administered by UTEP’s Center for Environmental Resource Management

Graduate students from across the world are turning to UTEP for a master’s-level program that will prepare them to lead social marketing campaigns in their communities or globally. And they’re doing it without stepping foot on campus.

The Department of Communication last year partnered with Rare Conservation, a nonprofit environmental conservation organization, to offer international students a communication master’s with a focus on environmental communication and social change.

The two-year program consists of a combination of instruction at universities in the United States, Mexico, China and Indonesia, along with implementation of students’ environmental campaigns in one of Rare’s nearly 40 locations across the world.

“It’s a one-of-a-kind program,” says Stacey Sowards, associate professor of communication and one of four UTEP representatives involved in the program. Others include Communication Department Chair Frank Pérez, Associate Professor Kenneth Yang and Assistant Professor Richard Pineda.

Eleven students have already begun studying at the Bogor Agricultural Institute in Indonesia, where Sowards visited in December.

At Rare’s site universities, students are trained to be campaign managers, developing location-specific social marketing plans called “pride campaigns.”

Wendy J. Paulson, who serves as chair of Rare Conservation, last fall visited UTEP and the 372-acre Rio Bosque Wetlands Park, which is administered by the University’s Center for Environmental Resource Management.

The wetlands serve as an example of the type of project that could benefit from a community pride campaign to help preserve the natural habitats of the region, bring back the ecosystems once found in the river valley, and educate the area’s residents about the importance of the park.

“The pride campaigns are directed toward addressing an environmental problem and working to shape environmental consciousness,” comments Sowards, adding that such a campaign would generate a more positive view of El Paso’s surrounding environment.

Aside from the professional and environmental opportunities provided by the communication program, the UTEP-Rare partnership could enhance the University’s global presence, says Pérez.

“These newly formed and forming relationships will lead to strengthening our international network with people concerned with environmental and social change issues,” he says.

Administrators say a doctoral program in communication and social change is in development.

Stories by Chris Lechuga and Cindy Ramirez
Social Work Master’s Approved

The UTEP College of Health Sciences has recently earned approval to offer a master’s in social work, a program set to enroll its first students in fall 2010.

Among the first in the nation to specialize in border issues, the program will train bilingual students and focus on the Hispanic culture, including family issues and elderly care, says Mark Lusk, Ph.D., director of the social work program and associate dean of the college.

Students also will receive hands-on training on issues specific to the Paso del Norte region—including human trafficking, immigration and domestic violence.

The demand for social workers is expected to grow by at least 35 percent in West Texas alone, Lusk says, especially as the challenging economic times are likely to impact an increasing number of low-income families who often turn to public assistance agencies—and therefore social workers—for help.

The program will accept students with a bachelor’s degree from any major; however, Lusk anticipates most of them will have backgrounds in social work, psychology, education, sociology, criminal justice and women’s studies.

The College of Health Sciences also offers a bachelor’s of social work, which partners with the Universidad Autónoma de Ciudad Juárez to promote binational education and research in social work.

Fulfilling Higher Aspirations

The University of Texas at El Paso Graduate School provides students opportunities to achieve the full range of their educational aspirations by offering 80 master’s and 16 doctorates—with additional degree options in development or awaiting approval.

With more degree choices and flexible course scheduling, graduate enrollment has reached nearly 3,500 students—indicative of the progress UTEP has made in developing relevant programs that open the doors for students to change or advance in their careers. In turn, employers in high-demand fields looking for qualified professionals—from business to education to health care—turn to UTEP to fill their workforce needs.

By expanding and strengthening its graduate-level programs—and continuing to build on its $50 million a year research portfolio—UTEP is better poised to become a national research (Tier One) university.

Among the newest and most innovative programs are an international MBA and an executive MBA, scheduled to begin in fall 2009; as well as a master’s in social work set to enroll its first students in fall 2010.

A doctoral program in computational science enrolled its first students in fall 2008, and the Ph.D. in Teaching, Learning and Culture kicked off this spring.

“These programs reflect UTEP’s strength in interdisciplinary research and teaching, its commitment to graduate education, and its commitment to serve students in this region with state-of-the-art and cutting edge programs,” says Patricia Witherspoon, Ph.D. and dean of the Graduate School.

Two other programs—a Doctor of Nursing Practice and Doctor of Physical Therapy—are pending approval by the Texas Higher Education Coordinating Board.

Learn More

Graduate School application and registration deadlines vary by program. For a complete list of graduate programs, see page 25. For enrollment and registration deadlines and more, visit www.utep.edu/graduate or call 915-747-5491.

DEAN’S LIST

Patricia D. Witherspoon
Dean, Graduate School

Education: Ph.D., Communication, UT Austin; M.A., Communication Arts, University of Wisconsin, Madison; B.S., Radio-TV-Film, UT Austin

Experience: Assistant to the Executive Vice Chancellor for Academic Affairs, University of Texas System; Associate Dean, College of Communication, UT Austin; Chair, Department of Communication and Director, Sam Donaldson Center for Communication Studies, UTEP

Memberships and Awards: International Communication Association, National Communication Association; International Leadership Association; Margaret Berry Award for Outstanding Contributions to Student Life, UT Austin; establishment of Patricia Witherspoon Research Award in the Annette Strauss Institute for Civic Participation, UT Austin

Leadership philosophy: Educators are in the business of helping other people’s dreams come true, so we must do all we can to help people make their dreams realities. Leaders should be future-focused and follower-focused. Give people responsibility, the resources they need, and your trust, and they will almost never let you down as they achieve both organizational and personal goals.

Top priorities for your school: Recruitment and retention, helping create more graduate program offerings and generating increased funding for graduate students.

What do you most admire about UTEP? The collaborative effort among administrators, faculty, and staff to create a premier educational experience and excellent educational preparation for its students. Its students! Their commitment to getting an education and improving life for themselves and their families.

What most colleagues/students do not know about you: I am married to my high school sweetheart. I celebrated 30 years as a faculty member/administrator in The University of Texas System in 2008.
Whether it’s reaching out to working professionals, military personnel, or preparing students for intelligence careers, University College offers an array of specialty programs and degrees that are helping meet the needs of today’s non-traditional students as well as changing workforce demands.

A few of the programs under University College:

• Bachelor’s of Multidisciplinary Studies allows students to customize their degree plan to fit their interests in three different areas of study. Nearly 4,500 students have graduated with a BMS since its inception in June 2006.

• Master’s of Public Administration prepares students for professional careers in public administration in the governmental, non-profit and private sectors. More than 50 students are currently enrolled.

• Master’s in Leadership Studies is an innovative program developed with the cooperation of the Captain’s Career Course at Fort Bliss and enrolls nearly 70 students.

• Intelligence Community Center of Academic Excellence was established in fall 2007 with a multi-year, multi-million dollar grant from the Office of the Director of National Intelligence. The center offers certificates in Intelligence and National Security in the undergraduate and graduate levels, a masters of science, and a high school summer program.

• Master’s of Science in Intelligence and National Security Studies provides a highly-rigorous interdisciplinary graduate program for students seeking employment or career advancement in the intelligence community. The program enrolled its first students in fall 2008.

• Law School Preparatory Institute is a rigorous, intensive course of study designed to prepare students for the academic environment found in law schools. Over the last 10 years, the LSPI has graduated more than 350 students who have attended approximately 65 different law schools.

University College also oversees the Fort Bliss Outreach Program, the Regional Geospatial Service Center and the Institute for Policy and Economic Development.
What’s in a Name?

The University of Texas at El Paso continues to provide resources to enhance the quality of life of the community, including numerous enrichment and recreational programs for residents of all ages.

To better serve the Paso del Norte region, the continuing education programs (formerly known as PACE) are now under the direction of University College and are known as Professional and Public Programs.

Under this new name, UTEP will continue to offer community enrichment programs for adults and youth, professional training and development, the English Language Institute, the Osher Lifelong Learning Institute and the Fort Bliss Outreach Program.

“We believe that this combination of highly respected programs and the dedicated faculty and professionals that make up University College will have a positive impact on the future of your continuing education,” says Dennis L. Soden, Ph.D., dean of University College.

These initiatives offer a wide variety of programs designed to help community members get a competitive edge in the workplace, strengthen their résumé and personal skills or just to unwind at the end of a long day.

Professional and Public Programs

Below are a few of the key programs offered through University College Professional and Public Programs. Information: www.utep.edu/pace or 915-747-5142.

- **Personal Enrichment Programs** include language instruction, money management, arts and crafts, music, dance, writing, youth programs and summer camps.
- **Career Development** courses enhance career-minded individuals to advance professionally. Spanish-language programs are available.
- **Certificate Programs** help individuals develop new skills or meet license/certification requirements in areas such as accounting, communication, customer service, human resources, management, purchasing and more.
- **Summer Athletic Camps** consist of youth outreach activities including, camps in cheerleading, soccer, basketball, volleyball, acting/drama, fencing, ballet and more.
- **Community Youth Programs** consist of year-round courses for kids that include ballet, piano, craft, and swimming classes.
- **Center for Lifelong Learning** is an educational program planned and operated by and for individuals 50 years of age or older.
- **Osher Lifelong Learning Institute** is an intellectually challenging television program of non-credit courses taught by UTEP professors and other similarly qualified experts.
- **English Language Institute** helps international students adjust to English as a second language.

Dennis L. Soden
Dean, University College

**Education:** Ph.D., Political Science, Washington State University; M.A., International Relations, University of Southern California; B.S., Economics, University of California at Riverside

**Experience:** Executive Director, Institute for Policy and Economic Development, UTEP; Director, Public Policy Research Center, UTEP; Director, Social Science Research Center, University of Nevada, Las Vegas; Director, the Whitman Center for State and Local Government, University of West Florida

**Awards:** Small Business Administration Research Champion Award for SBA Region 6, 2004

**Leadership philosophy:** To provide the greatest set of opportunities to students realizing they may not be able to participate in a traditional academic setting.

**Top priorities for your college/school:** Expand opportunities for non-traditional degree programs for professionals; expand opportunities for Fort Bliss soldiers, employees and their families; continue the research and service opportunities that link the college to the community such as the Institute for Policy and Economic Development.

**What do you most admire about UTEP?** The student body and the barriers UTEP students overcome to get their education.

**What most colleagues/students do not know about you:** I am an avid sailor and like to cook.
The University of Texas at El Paso has experienced stunning growth in its research capacity during the past 20 years. Annual research spending has surged to more than $50 million a year, compared to just $3 million two decades ago.

Undoubtedly, UTEP is positioning itself as a leader in science, engineering and numerous other fields.

The following section of the UTEP Magazine highlights many of the projects and programs that make UTEP a unique institution for conducting research. Scientists are testing drug therapies in the Bioscience Research Building, fabricating medical devices in the College of Engineering, and boosting the speed and reliability of UTEP’s high performance computing systems.

This is just a small slice of the hundreds of research projects underway at UTEP, where distinguished faculty and talented students find endless opportunities for discovery.
As vice president for research at The University of Texas at El Paso, Roberto A. Osegueda, Ph.D., is providing the leadership and day-to-day administration necessary to help the University achieve its goal of becoming a national research (Tier One) institution.

Since 2005, Roberto Osegueda has headed the Office of Research and Sponsored Projects, UTEP’s “one-stop shop” for faculty and staff seeking outside funding for their research, education and outreach projects.

The University has made great strides in building capacity and creating a healthy environment for research, growing its annual research spending from less than $3 million in 1988 to more than $50 million in 2008.

“This success is due in part to the capital investment the University has made in research equipment and facilities, an investment that has facilitated the recruitment and retention of faculty who successfully compete at the national level,” Osegueda says. “UTEP’s success is also enhanced by the supportive climate for research, creative and scholarly activities in all of UTEP’s colleges.”

Last year, nearly 300 faculty and staff members engaged in research and sponsored projects, and a record 512 proposals were submitted, resulting in $77 million in new funding to the University and the El Paso region.

Osegueda brings an impressive academic background and more than two decades of experience as an educator and researcher at the University. He earned his Ph.D. in civil engineering at Texas A&M in 1987, and began his career at UTEP the same year. He became a full professor in 1997, after having engaged in numerous externally funded research projects.

From 1995 through January 2003, he served as the director of the Future Aerospace and Technology Center at UTEP, an interdisciplinary research unit focusing on nondestructive evaluation and structural integrity issues associated with aging aircraft structures.

From September 2001 through August 2005, he served the College of Engineering in the capacities of assistant dean, interim dean and associate dean for research. He not only acquired a clear understanding and knowledge of the technical engineering disciplines, but also of the operations, mission, vision and objectives across the University. At the same time, he became an enthusiastic advocate for the University’s efforts in continuous quality improvement, curriculum innovation, entering students program, student retention, and all factors that enhance success within UTEP’s philosophy of access and excellence.

“UTEP faculty and staff have attracted widespread national recognition for their cutting-edge research in many disciplines, such as bioinformatics, biomedical science, bioengineering, computer and computational sciences, nanomaterials, and manufacturing, to name a few,” Osegueda says. “UTEP is also committed to providing research opportunities to students, particularly undergraduates, that both support them financially and give them experiences that make them competitive with graduates from top-tier universities.”
An exciting field of research is emerging at The University of Texas at El Paso, offering unique opportunities for students with a passion for medicine and engineering.

Laboratories, equipment and talented faculty are part of a new biomedical engineering program, growing under the leadership of College of Engineering Dean Richard Schoephoerster, who arrived at UTEP in 2007 with a wealth of experience building similar programs at Florida International University.

Schoephoerster came on board with significant support from The University of Texas System, which welcomed him with $1 million from the Science and Technology Acquisition and Retention (STARS) award program, designed to attract research stars to U.T. System institutions.

The STARS award was icing on the cake for Schoephoerster, who also recognized the elements of a perfect storm of opportunity in the Paso del Norte region—UTEP’s famed engineering school, an international manufacturing sector, and the launch of the Paul L. Foster School of Medicine at the Texas Tech University Health Sciences Center at El Paso.

“It’s a very unique opportunity to start a biomedical engineering program at the same time that a medical school is getting underway,” Schoephoerster says. “We’ve been working on real strong relationships with the Texas Tech medical school. We are building up collaborations and research proposals so that our research interests will match with the interests of the medical school.”

In the meantime, Schoephoerster is laying the foundation for a robust biomedical engineering program at UTEP. The STARS award helped establish five new bioengineering laboratories. Also, the college has submitted its application to the U.T. System for approval of master’s and Ph.D. programs in biomedical engineering. After approval by the system, the programs will be reviewed by the Texas Higher Education Coordinating Board.
“We’re hoping to implement those programs in the fall of 2010,” Schoephoerster says.

Schoephoerster also is excited about opportunities to partner with institutions across the border, such as Universidad Autónoma de Ciudad Juárez (UACJ), on projects to create low-cost, portable medical diagnostic equipment.

“There is a real need for equipment like this in the developing world,” Schoephoerster says. “It’s a whole new paradigm for engineers—to design and build medical equipment that is inexpensive and easy to use out in the field.”

NEW BIOMEDICAL ENGINEERING LABS at UTEP
$1 million U.T. System STARS Award helps establish new labs

- The Biomaterials Performance Evaluation Laboratory, for studies on joint replacements, bone fixation devices and other hard tissue implants
- The Biopotential Imaging Laboratory, for measurements and 3-D simulations of electric activity in the brain, cardiovascular system and muscles
- The Laboratory for Human Motion Analysis and Neurorehabilitation, for studies on disabilities caused by neurological disease or injury
- The Biomodeling and Biodesign Laboratory, a multidisciplinary center for CT and MRI imaging, the development of 3-D anatomical models, and devices for tissue engineering
- The Pervasive Health Technology Laboratory, for developing technologies for monitoring and diagnosis of pulmonary diseases such as asthma, COPD and cystic fibrosis

Thompson Sarkodie-Gyan, Ph.D., director of UTEP’s Laboratory for Human Motion Analysis and Neurorehabilitation, holds reflective markers used in his Smartgait Rehabilitation System, a specialized treadmill that helps doctors measure and analyze a patient’s walking pattern.
The average computer user has all the fun—there are action games for blowing off steam; useful word processing and number-crunching programs to boost work productivity; and let's not forget the addictive social networking sites that connect us over the Web.

Lots of fun, yes, until viruses, buggy software, and hardware and network problems cause our trusty machines to start behaving badly.

It's at this point we begin to understand how complicated computing has become, and why researchers in The University of Texas at El Paso's Department of Computer Science are working to enhance the performance of processors, shared computing networks, and other hardware and software elements that form the foundation of high-performance computing.

Computer Science Professor Patricia “Pat” Teller leads a team of seven Ph.D. students, two undergraduates and a research specialist in the department's High Performance Systems (HiPerSys) Laboratory.

“I don’t think the average person on the street realizes the challenges we face in computer science today,” says Teller, who has witnessed the rapid evolution of computing over nearly two decades as a researcher.

**MULTI-CORE**

One advancement that has researchers scrambling to stay on top of the technology curve involves the microprocessor, the computer's central processing unit (CPU) “brain.” Having maxed out the power of single processors, manufacturers have unleashed chips with more brains, or multi-core processors.

At first glance, these dual-core and quad-core processors, with promises of blazing speed, seem ideal. But getting max performance requires a major shift in programming philosophy. To tap the processors’ power, software must be written so that each core can work on a piece of a problem, either simultaneously or in an order that delivers efficient and reliable results. This often requires “parallel programming,” a difficult challenge for generations of software writers who cut their teeth programming sequentially for single-processor chips.

Researchers call this challenge “pervasive parallelism,” because programmers face a certain future of new processors loaded with even more cores, as well as hybrid chips that combine CPUs and graphics processing units (GPUs).

“Although we think in parallel all the time, programming in parallel is not intuitive if one has developed only sequential programs,” says Teller. “We are going to have to look at new paradigms for computer science coursework, where students are taught parallel computing right from the beginning.”
THE RIDDLE OF THE CHIMERA

Now, if programming for multi-core chips isn’t hard enough, imagine developing software for a system made up of different machines and processors linked over a network, with scientists and engineers lining up to run complicated simulations for weather, biological reactions, explosions and the like.

These systems are “heterogeneous clusters,” and they create another kind of headache for maximizing performance, scheduling computing tasks, and guaranteeing reliability of results.

As you might expect, these mega-systems are often geographically spread-out; for example, the TeraGrid, which extends throughout the United States. Such systems often consist of clusters of computers, and some of these clusters have partitions with different types of processors.

Teller’s team is investigating ways of optimizing this kind of computing power as part of a multi-university consortium that manages the U.S. Army’s High Performance Computing Research Center. Teller helped lead UTEP through the competitive process to join the consortium, which is funded by a $215 million U.S. Army Research Laboratory award.

“We are testing ways to improve the performance of these kinds of systems on a heterogeneous cluster right here at UTEP, made up of Sun Niagaras, Opteron quad-cores with nVidia, FPGA, and ClearSpeed accelerators,” Teller says. “It is dubbed ‘Chimera,’ after that mythical beast made up of parts of different animals.”

HPC AT UTEP

HiPerSys project highlights:

- Sarala Arunagiri, Ph.D., a research specialist, is studying ways to performance-tune large-scale systems. One method involves checkpointing—periodically saving information during long software processes. If there is a system failure, the program restarts at the last checkpoint, rather than from the beginning.
- Arunagiri and Ph.D. candidate Yipkei Kwok are working with alumnus Seetharami Seelam, Ph.D., at IBM’s T.J. Watson Research Center, on enhancing the scheduling of input and output, making sure every process gets its “fair share” of disk time.
- Arunagiri and master’s candidate Uphaar Goyal are characterizing applications in terms of phases, which will help develop adaptive methods for managing computer resources.
- Mitesh Meswani, a Ph.D. candidate, is investigating the scheduling of simultaneous multithreading (SMT) processors, which makes better use of hardware and gets results to users faster.
- Ricardo Portillo, a Ph.D. candidate, is investigating “autonomic computing” in large-scale systems. An autonomic system monitors itself and adapts to changing conditions.
- Maria Ruiz Varela, a Ph.D. candidate, is investigating ways to cope with failures in large-scale computing systems.
But it’s what is happening inside their bodies that concerns Vella, an assistant professor of kinesiology who is conducting a study on young women who may be predisposed to diabetes, cardiovascular disease and other serious health problems.

Those who fit this profile are described as “metabolically obese, normal-weight,” a term coined in the 1980s to describe individuals who don’t have issues with their weight, but have many of the metabolic problems that accompany obesity. These include insulin resistance, which increases the chance of developing type 2 diabetes and heart disease; a high percentage of body fat, particularly around the abdomen; and high blood pressure.

“With these kind of metabolic disorders, studies usually examine obese, older populations,” says Vella. “Nobody has really focused on young women, particularly young Hispanic women, and why many of them are at risk of developing diabetes and cardiovascular disease.”

It’s a critical issue to study, because cardiovascular disease is the leading cause of death in women, according to the Centers for Disease Control. Among Hispanic women, heart disease accounts for 24 percent of all deaths.

Vella’s three-year study, “Characteristics of Metabolically Obese but Normal Weight Hispanic Women,” is funded by a $333,000 National Institutes of Health grant. The results of the study will help add to the body of knowledge being gathered by UTEP’s Hispanic Health Disparities Research Center.

Vella will study a group of about 100 Hispanic women aged 18-39. The women will be tested for insulin resistance, and their glucose and cholesterol levels will be measured. Their body fat composition and distribution also will be measured, and they will be given a cardiorespiratory fitness test. Also, their level of physical activity will be measured over a period of time.

Vella expects 15 to 20 percent of the women to fall within the metabolically obese, normal-weight description.

Vella hypothesizes that these young women at risk for health problems are not getting necessary amounts of exercise, and, of course, diet could be a major factor as well. But also coming into play are genetic factors, such as body composition and fat distribution.

“The study will help us understand what is contributing to this metabolic obesity,” Vella says. “Then we can develop effective ways to address the problem—that’s the next step.”
With a new, $45.1 million Bioscience Research Building to work in, and a talented group of faculty and student researchers to oversee, it’s no wonder Department of Biological Sciences Chair and Professor Robert A. Kirken, Ph.D., is enthusiastic about the future of research at The University of Texas at El Paso.

Kirken joined the faculty at UTEP in 2005, by way of the University of Texas Medical School at Houston, where he served as an assistant and associate professor in the Department of Integrative Biology and Pharmacology.

“What I liked about coming to UTEP was the opportunity to build a center for excellence in biological research,” says Kirken.

What UTEP received in return was enticing as well—Kirken brought his research expertise on immune system response, and a variety of studies that hold promise in developing treatments for autoimmune disorders such as Lupus, certain types of T-cell cancers such as lymphoma, or drugs that can help prevent rejection of transplanted organs.

In addition to serving as chair of biological sciences, Kirken is director of UTEP’s Border Biomedical Research Center (BBRC), which focuses on infectious diseases, environmental health and neurological and metabolic disorders.

It’s an enviable position of leadership for a young researcher—Kirken is 44, and being a lifetime fitness and sports fanatic, a very youthful 44 at that.

His energy and enthusiasm suit the nature of his job, which is to grow the University’s biomedical research capability. UTEP’s research teams are now settled in the 100,000 square-foot, five-story Bioscience Research Building. The new building and the adjacent Biology Building are home to the BBRC’s core research facilities, which include laboratories for analytical cytology, cell culture and statistics, and facilities for biomolecule characterization and DNA analysis.

As an administrator, Kirken says he approaches his work by “wanting to be the department chair that I would love to have as a researcher.”

“I want to streamline the process and help our scientists by getting extra research money,” he says. “If their dream is to find a cure for something, then that is my dream, too.”

Kirken also wants to offer as many research opportunities as possible for graduate and undergraduate students.

“They will have the opportunity to work in a world-class facility and go on to be world-class scientists.”

On the Web: Border Biomedical Research Center, research.utep.edu/bbrc
Ahsan Choudhuri is working on some fascinating aerospace and defense projects in his laboratory at The University of Texas at El Paso College of Engineering, but sometimes it’s hard to get him to talk about that research.

Instead, Choudhuri, a research associate professor of mechanical engineering, is eager to address the issue of increasing the number of Hispanics and other minorities in the aerospace engineering pipeline, something he’s been able to do in his Combustion and Propulsion Research Laboratory (CPRL).

“That’s one of the big missions of my laboratory—Hispanics are so underrepresented in these engineering areas,” says Choudhuri, who earned his Ph.D. in aerospace and mechanical engineering from the University of Oklahoma. “And in the aerospace industry, the workforce is growing older, and those workers will eventually need to be replaced.”

Nearly a third of America’s 630,000 aerospace workers are headed for retirement, and 60 percent of the workforce is 45 years or older, according to the Aerospace Industries Association.

Choudhuri’s students are fortunate that his research is cutting-edge, focusing on the properties of a promising clean-burning fuel known as synthesis gas or syngas, as well as propulsion technologies for space vehicles.

Choudhuri’s lab has landed several grants from the Missile Defense Agency for a project investigating propulsion technologies for use in ballistic missile interceptors.

As conceived, the agency’s small interceptors will weigh several pounds each and be bundled onto a larger “carry vehicle” launched to intercept an oncoming ballistic missile attack. Once close to their targets, the small interceptors would be released, and their miniature rocket engines would steer them into the oncoming missiles, causing them to be destroyed by the kinetic energy of the high-speed impact. The small interceptor missile defense offers the advantage of a “shotgun approach” to destroying multiple targets or destroying missiles surrounded by decoy targets.

“When it comes to ballistic missile defense, you have to have a 100 percent success rate,” Choudhuri says.

Choudhuri says the miniature propulsion engines will also be useful in the emerging technology of “nano-satellites,” small, relatively inexpensive satellites weighing just a couple of kilograms that could be used in communication and monitoring networks.

In the CPRL, opportunities for hands-on experience begin at the undergraduate level.

Junior mechanical engineering major Federico Esquivel is working with clean fuel technology and the gas turbine combustor equipment. The project is funded by the Department of Energy.

“I enjoy this kind of research, because I know securing new, clean sources of energy is important to our future,” says Esquivel, 21.
You don’t have to drive far to learn that America’s transportation system is in need of repair. Bounce across some rutted, pothole-filled pavement or get stuck in a rush-hour traffic jam and you’ll get the message.

It’s why the American Society of Civil Engineers has given a cumulative grade of “D” to the nation’s infrastructure in its latest Report Card on the condition of roads, bridges and other public works across the country.

In Texas, the challenges of finding cost-effective ways to improve road construction often find their way to the Center for Transportation Infrastructure Systems (CTIS) at The University of Texas at El Paso.

Directed by Civil Engineering Professor Soheil Nazarian, CTIS brings together more than 50 undergraduate and graduate students involved in a variety of projects, including the testing and building of road materials, the design of transportation projects, and the planning of effective traffic management systems.

The Texas Department of Transportation (TxDOT) recently awarded CTIS more than $1 million for four projects, two of which involve investigating the use of recycled materials in road construction.

Recycled materials are attracting a lot of interest because of their potential for cost savings and their benefits for the environment, Nazarian says.

“Easily accessible sources of good road materials are running out,” Nazarian says. “The focus now is finding ways to use recycled materials—crushed concrete and asphalt.”

The researchers will apply different additives to the reused materials to boost their strength in new construction.

“Ultimately, the goal is to have zero percent material ending up in landfills,” Nazarian says.

**BIG LAB**

Complementing CTIS is the Border Intermodal Gateway (BIG) Laboratory, directed by Ruey Long “Kelvin” Cheu, associate professor of civil engineering.

The BIG Lab has a number of projects underway involving the movement of vehicles and transportation of people and freight, both domestically and internationally. As with CTIS, the BIG Lab’s expertise is tapped by TxDOT, the El Paso Metropolitan Planning Organization, Federal Highway Administration (FHA) and other agencies in need of solving transportation problems.

One project, funded by the FHA, will likely be appreciated by anyone who has attended a public meeting on transportation and had to pore over posters of proposed changes in their neighborhood or city.

Cheu and his team are studying the effectiveness of computer animations as a way of explaining transportation projects to the public.

“We want to see how video animations can improve the public participation process in transportation projects,” says Cheu. “We think these kind of visualization techniques can help the public avoid a lot of misconceptions.”

Center for Transportation Infrastructure Systems Director Soheil Nazarian, Ph.D., left, and Border Intermodal Gateway Laboratory Director Ruey Long “Kelvin” Cheu, Ph.D., stand beneath the Spaghetti Bowl interchange in Central El Paso.
At a crossroads between western and eastern cultures, the Hashemite Kingdom of Jordan boasts an incredibly rich heritage filled with traditional Arab and Islamic principles.

Bordered by Syria, Iraq, Israel and Saudi Arabia, Jordan is evolving into a modern paradigm of political, economic and social globalization, yet remains steeped in tradition.

Fourteen talented UTEP students pursuing intelligence or international careers recently had an opportunity to experience the country’s dichotomy firsthand. As part of a Special Topics mini-semester course, Jordan: Its Place in the Modern World, the group traveled to the City of Tafila, south of the country’s capital of Amman.

“The experience afforded us an opportunity to learn what you can’t get from a textbook,” says Alejandro Palma, who’s pursuing a master’s in Intelligence and National Security Studies at UTEP. “It was an eye-opener.”

In Jordan, students received intense Arabic language training, visited Amman, as well as a number of government institutions, and had the opportunity to interact with policymakers and scholars. The students also traveled to historic monuments and scenic escapes.

The for-credit course is offered by UTEP’s Intelligence Community Center of Academic Excellence, which prepares students for leadership roles within the intelligence and security communities.

The center was established in 2007 with a grant from the Office of the Director of National Intelligence. As one of only 10 such programs in the nation, the intelligence center is at the forefront of training the next generation of analysts for the demands of the 21st century.

“Our student body is a perfect fit for these careers because they are living in a border setting and are not inhibited when it comes to learning and speaking dual languages or being exposed to different cultures,” says Dennis L. Soden, Ph.D., dean of University College and director of the intelligence center.

The students were in Jordan during the 2008-09 Israel-Gaza conflict, which by most reports claimed 1,300 lives and left some 5,000 injured.

“It helps you see things from a personal level that helps you understand the history, politics and emotion behind these conflicts,” says Ruben Vogt, who will receive a master’s in Public Administration with a concentration in Intelligence and National Security Studies this May.

Conflict aside, the Jordanian people were enthusiastic about discussing their history, politics and culture, says Leah, a multidisciplinary studies major who asked her last name not be used for security concerns.

“They ensured that we felt welcomed and gained an understanding of their beliefs and how they reflect in their daily lives,” says Leah, whose studies concentrate in mathematics, criminal justice and national security.

Past courses have taken students to Egypt and Brazil; this summer, to Peru, where they’ll focus on border relations.

“They change dramatically—their self-confidence grows tremendously after an experience like this,” Soden says. “They emerge as true scholars and leaders.”

Petra, a stunning archeological site carved from a cliff face in Jordan

Photo credit: Getty Images
INTERNATIONAL PARTNERSHIP

TOP: Sightseeing Miners. BOTTOM: Tafila Technical University President Sultan T. Abu-Orabi and UTEP President Diana Natalicio
Under a memorandum of agreement between the two universities, Middle Eastern scholars will soon come to The University of Texas at El Paso to obtain doctorates and return to teach in Tafila in order for the Jordanian institution to expand its faculty capacity. In turn, UTEP students and faculty are offered a unique opportunity to advance their study of Arabic language and culture at the Tafila university.

“UTEP is delighted to enter into this partnership to accelerate both our institutions’ capacity-building,” says UTEP President Diana Natalicio, who visited Jordan in January.

“Our previous experience has demonstrated that a clearly articulated set of reciprocally beneficial expectations is a key factor in strengthening and sustaining inter-institutional partnerships, and this UTEP-TTU collaboration seems particularly promising in that regard,” Natalicio says. “We look very much forward to continuing to build ties with our Jordanian colleagues and friends in the years ahead.”

The first technical university and the ninth public university in Jordan, Tafila Technical University is located in the City of Tafila, south of Amman.

Formerly a regional college that granted only two-year degrees, TTU acquired university status in 2005.

“Our plans to contribute to the higher education system in Jordan are ambitious and correspond to the ever-rising need of our country, and we have made great strides along this path,” says TTU Advisor to the President for International Relations Marwan M. Obeidat. “We look forward to UTEP’s offer to contribute to the development through the collaborative projects in research, curriculum development, transnational education programs, faculty and student exchanges and more.”

More than helping develop TTU, the partnership is critical to forging relationships between two nations, officials say.

“This visit opened a new era concerning the relationships between both universities,” says TTU President Sultan T. Abu-Orabi. “Such dialogue is very important to understand each other. This will narrow the gap between the American people and the Jordanians.”

Dennis L. Soden, Ph.D., dean of UTEP’s University College, traveled with Natalicio and was instrumental in establishing the relationship with the Jordanian university.

“It’s been a terrific opportunity to invite scholars from Tafila to pursue their doctorates at UTEP and showcase our University, our academics and research, and our students,” Soden says. “As we continue to travel abroad, we look to establish these types of relationships for the exchange and sharing of ideas and opportunities.”

Abu-Orabi’s daughter will be the first to come to UTEP this summer to study English, Soden says. Others will follow in the fall semester; several have already applied for admission into UTEP’s Graduate School to pursue doctorates, mostly in engineering fields.

“Next fall, we will see many Jordanian students walking around UTEP to pursue their graduate studies, and when they finish their studies they will return to Jordan and become good ambassadors for UTEP,” Abu-Orabi says. “We’re also hoping to see the Texas students from UTEP walking around the TTU campus.”

“UTEP and the Tafila Technical University in Jordan are bridging more than educational gaps—they’re forging relationships between two nations.”
At the helm of mission STS-126, Ginger Kerrick directed a crew of seven astronauts who set out to deliver tools and supplies to the International Space Station aboard the shuttle Endeavor in November 2008—becoming the first person of Hispanic descent to lead Mission Control for NASA.

She says her most challenging duty was to ensure the entire crew “put enough thought” into an array of emergency scenarios that could change the existing flight plan.

One of the scenarios was a critical situation involving a now-famous tool bag, which was lost by an astronaut during a spacewalk.

Working diligently to find a way to help complete the mission’s duties without the hardware, Kerrick says she first gave the astronaut time to collect herself. In the meantime, she successfully collaborated with the spacewalk officer to develop a Plan B.

With quick thinking, strong direction and teamwork, the crew met every requirement of the mission, including the primary goal of installing a component to the International Space Station that would provide the capability to house more astronauts.

**Dreams take flight**

Spaceflight had fascinated Kerrick since she was 5: “I knew that I wanted to work for the space program when I read about manned spaceflight in a book my dad got me from the library.”

Set on her career goals early on, Kerrick wrote to NASA to inquire about employment. She was 12. Her NASA career would have to wait.

While attending Hanks High School in El Paso, Kerrick took a physics course at UTEP where she saw firsthand the caliber of the science department. She enrolled at UTEP in 1985 and majored in physics.
“Hanging out late studying at the library, it was everything college should be - learning, friends, and fun,” says Kerrick, who joined the UTEP women’s basketball team but was sidelined with a pre-season knee injury. She later transferred to Texas Tech University to finish her bachelor’s and master’s degrees, both in physics.

Kerrick would again inquire about employment with NASA and this time, her résumé was as strong as her dreams, landing her a position at the Johnson Space Center in 1994.

Her dreams have taken flight since.

Kerrick has been involved with 18 NASA missions, with roles that include instructor, CAPCOM (capsule communicator), and flight director. She supported shuttle missions STS-118 and STS-120 in 2007, and STS-123 in early 2008.

Miner days

Throughout her successful career, Kerrick always has remembered her Miner days fondly.

She recalls an encounter with the late Coach Don Haskins during a tough practice when the Bear was watching from the top bleachers. After a couple of drills, he growled out to former women’s coach Craig Roden, “Aren’t you being a little rough on those girls?”

Perhaps Kerrick thought so at the time, but those practices were part of her cherished college experience, she says, noting that her Miner days helped her grow socially and academically.

Off the court, Kerrick credits the physics department and its professors for providing a strong foundation for her to build on.

UTEP, along with support from her family and friends, were instrumental in helping her along the path to success at NASA, she says.

“I’ve learned quite a number of lessons in life and in my career,” she says, “and I’ve had an opportunity to both apply those to situations here at NASA and share those with the newcomers.”

Space Miner

Astronaut and UTEP alumnus John “Danny” Olivas took Miner pride to a new level when he traveled into outer space last summer as part of Space Shuttle Atlantis Mission 117.

Today, the El Paso native is preparing for his second trip to space. This time he’ll be part of Mission STS-128 that is set to launch in August, tentatively aboard shuttle Discovery. The assignment will include two spacewalks to remove and replace a materials processing experiment.

He’s sure to again carry his UTEP loyalty into the stratosphere.

At one point during one of his two spacewalks during his first mission—as he was traveling about 250 miles above the Earth—Olivas raised his left hand to form the Miner pick sign outside the International Space Station. Olivas wore a Miner T-shirt and carried an orange flag emblazoned with the UTEP logo—inspiring future generations of Miners to reach to the stars.

On day nine of the mission, NASA Mission Control roused the crew with a morning wakeup call featuring the UTEP Fight Song.

With Miner pride amped up across the heavens, forget Miner Nation. This is a Miner universe.
Benjamin Ramos

UTEP kinesiology major Benjamin Ramos didn’t have his future written in the stars. It was in his penmanship.

“My parents would look at my hideous handwriting and say I’d make a great doctor,” Ramos says. “The idea might have dug in after years of hearing that.”

Ramos, who graduates this May, is among the 40 medical students who will start classes in July at the Paul L. Foster School of Medicine in El Paso, a new four-year medical school within the Texas Tech University System. Ramos and his fellow medical students were chosen from among 2,500 applicants: Quite a feat considering the low acceptance rate of less than 2 percent. He’s among nine students from El Paso and 36 from Texas chosen to be part of the first class of the medical school.

A Nashville native, Ramos has lived in El Paso since he was 10. He graduated from Franklin High School and enrolled at UTEP in 2003. Bouncing from one major to another, Ramos took classes in education, marketing and physical therapy.

After putting in more than 300 community service hours as a volunteer at the Advocacy Center for the Children of El Paso, Sierra Medical Center, and various public schools, he realized his true calling was to use science to help others.

He received a four-year scholarship thanks to his community service, 3.9 GPA, and strong scores on the Medical College Admission Test.

The ambitious Ramos says he hopes to open a non-profit clinic in El Paso. In the meantime, the 23-year-old has to decide on a medical specialty.

“I’ve changed my mind at least 60 or 70 times,” he says with a laugh. “But I’d like to be some sort of surgeon and do some type of pro-bono work. There is so much that can be done in El Paso.”

Laura O’Dell, Ph.D.

A wave of emotions overcame UTEP researcher Laura O’Dell, Ph.D., as she waited in the White House for President George W. Bush to present her with the Presidential Early Career Award for Scientists and Engineers.

“Sometimes you want to hold on to a moment. I felt the same thing when my daughter was born,” says O’Dell, who with her husband, David Montelongo, is expecting her second daughter in May. “I never want to forget what that felt like.”

O’Dell was one of 12 outstanding young researchers nationwide selected by the National Institutes of Health to receive the prestigious award. Her selection came with a grant of nearly $1 million for her efforts to study the effects of nicotine on the adolescent brain. O’Dell previously had received a $1.5 million grant from the NIH’s National Institute on Drug Abuse for her research.

“What makes my heart beat is my research,” she says. “The extension of my grant means more dollars for my research.”

In her lab, O’Dell and her team of research students are trying to figure out why adolescents, particularly females, are more vulnerable to nicotine addiction than adults. Her research also has evolved into a new study examining the effects of nicotine on the diabetic population.

A native of El Paso, O’Dell attended UTEP for two years before heading to Texas A&M University, where she obtained a bachelor’s in psychology and biology. She earned her master’s and doctoral degrees in behavioral neuroscience from Arizona State University.

Before she joined the UTEP faculty in 2005, O’Dell served as a staff scientist at the renowned Scripps Research Institute in La Jolla, Calif., one of the country’s largest, private, non-profit research organizations.

“When I started teaching at UTEP, I saw myself in a lot of the students,” O’Dell says. “I thought this would be such a blessing to combine my research with helping young people that want to do science.”
As a monstrous Caterpillar 325BL Excavator tore down Elizabeth Ruiz's house in January, the UTEP freshman stood proud in her decision to attend college close to home and continue serving her community through her family's ministries.

Her unfinished, water-damaged brick home in El Paso's Lower Valley was demolished and replaced by a new one courtesy of the hit ABC show, Extreme Makeover: Home Edition.

Led by Desert View Homes of El Paso, hundreds of volunteers donning the show’s traditional blue T-shirts worked around the clock to build the Ruiz family a two-story, stucco home with a Spanish style roof in just five days.

In as little time, the spirit of giving across the Paso del Norte region also was made over: Tons of canned goods, clothes, blankets and other items were collected for the Ruiz family ministries, which help impoverished families across the border in Juárez, Mexico, and in some areas of El Paso.

“That was truly inspiring,” says Ruiz about the community's response and donations. Along with daily efforts to deliver food and clothes, the family plans to build an orphanage, job training center and community kitchen that will serve several Juárez colonias.

The “Extreme” episode that showcased the family's volunteerism—and revealed their new home—aired March 15.

The Ruiz family—Elizabeth, mother Maria, father Jesus and brother Jesus Jr.—has gained national fame for its volunteer work. Aside from collecting canned goods, many volunteered to rebuild the Ruiz home. Numerous others rooted for the family as Makeover host Ty Pennington led the crowd of thousands in the well-known “Move that Bus” cheer that kicks off the revelation of the new home.

Some faculty invited the family to share its story in hopes that students will learn the true meaning of civic engagement.

“I talk with a lot of employers, and they are interested in community service,” says David Sterling, a lecturer and advisor in the College of Business Administration who invited Elizabeth to speak to his class. “They care about how prospective employees share their experience and contribute to society.”

The reward in that community engagement, Maria Ruiz says, is that “the world changes when you follow your heart.”

by Daniel Perez and Cindy Ramirez

Top to bottom:
1. An excavator begins to tear down the old Ruiz home.
2. The new home begins to take shape.
3. Makeover host Ty Pennington with Jesus Ruiz Jr.
4. Ruiz family, from left: Jesus Jr., Jesus, Elizabeth and Maria
For Bill Robertson, Ph.D., skateboarding is more than a recreational sport. It’s science in action.

“We don’t often think about it, but everything about a skateboard—from how it’s built to how it’s ridden—is based on science,” says Robertson, an assistant professor of teacher education at UTEP. “It has become one of my favorite teaching tools as well as my pastime.”

In his classroom, Robertson uses the sport as an example of creative ideas future educators can apply in their lessons. Outside of his classroom—in skate parks, school yards and outdoor events across the region—he uses skateboarding and BMX cycling as a way to spark an interest in science in young minds.

His skateboard serves as an example of levers, pivots, fulcrums and more; his jaw-dropping tricks illustrate gravity, centripetal forces and Newton’s Laws of Motion, to name a few.

The Ph.D. has become known as Dr. Skateboard. A Fulbright Scholar who has taught at UTEP for more than four years, Robertson has developed a series of science-education videos, Dr. Skateboard’s Action Science, which have become part of the science curriculum used in middle schools across the El Paso and Socorro independent school districts.

“Action science can be defined as the use of familiar objects, circumstances and situations within the lives of students in order to explain specific concepts in science built around student interests,” Robertson says. “It doesn’t have to be skateboarding. That just happens to be my specialty.”
THE NOSE MANUAL
CONCEPT: LEVERS AND FULCRUMS
• A lever is a rigid object used with a pivot point to multiply the force that is applied to another object; a fulcrum is the pivot point on which a lever moves.
• On a skateboard, the fulcrum is the place where the trucks (metal parts that form the axle) and the deck (wooden platform) come together.
• Pushing down on one end of a lever results in the upward motion of the opposite end of the fulcrum.
• The upturned kick acts as a lever and helps lessen the force exerted by riders; while the lever action of a skateboard allows riders to have greater control of the board.

FRONTSIDE GRIND
CONCEPT: NEWTON’S SECOND LAW OF MOTION
• \( F=ma \) states that the acceleration of an object depends on the mass of the object and the force applied to it.
• Since acceleration is a change in velocity with a change in time, both concepts can be explored in relation to Newton’s Second Law of Motion.
• A force will cause a change in velocity, and likewise, a change in velocity will generate a force.

HANDSTAND
CONCEPT: CENTER OF GRAVITY
• Known as the center of mass
• In an individual, the center of gravity is a point that defines the center of mass, and it is roughly located at a person's belly button.
• In order to be successful in skateboarding, riders must understand how to control the distribution of their mass by controlling their center of gravity.
• The closer the center of gravity is to the center of the board, bike or rotational axis, the better chance the rider has of successfully completing a trick.

FRONTSIDE AIR
CONCEPT: GRAVITY VS. LIFT
• Relationship between forces that move in a vertical direction, with gravity acting in a downward direction, and lift in an upward direction
• A force is a push or a pull upon an object, which results from its interaction with another object.
• Forces always come in pairs (action-reaction), and are two separate forces acting on two different objects.
• An action force pushes in a direction; a reaction force pushes equally in the opposite direction.

When not skateboarding or teaching, Robertson, who earned a Ph.D. in multicultural teacher and childhood education from the University of New Mexico, enjoys traveling, hiking, running, weight-lifting and golf. Robertson also holds a master's in science education from the University of Colorado at Boulder and bachelor's degrees in biology and history from Northern Arizona University and Duke University, respectively.
The women’s basketball team registered an unprecedented third straight winning season and a slew of individual accolades, including a second Conference USA Player of the Year nod to junior Jareica Hughes.

With that honor, Hughes becomes the third player in league history to reap multiple awards. Hughes toppled UTEP’s career standards for assists and steals, while also becoming the sixth member of its 1,000-point club. She will enter her senior season on pace to shatter the career point record for UTEP women’s basketball, while also finishing with the most wins of any Miner.

Sharp-shooting guard Dietra Caldwell secured the C-USA Freshman of the Year award, making UTEP the first school in conference history to earn both of those honors in the same year.

Junior Timika Williams became the first player to pace UTEP in rebounding for three straight seasons. She joins former Miner great Kiana Taylor as the only players in school history to boast more than 800 career points, 600 rebounds and 100 steals.

Head Coach Keitha Adams reached 250 collegiate career victories, including 123 in her time with the Miners. Her next triumph will make her the winningest coach in the program’s history.

Overall, the senior-less Miners posted a record of 18-12, including 11-5 in C-USA action, en route to staking second place in the most competitive league in its history. This season’s overall triumphs tie as the third highest in school history, while the 11 league victories check in second.

The season also marked a school record of three consecutive campaigns with at least 10 league wins. UTEP handled its home court by securing 12 victories at the Don Haskins Center.
A thrilling postseason run turned Miner men’s basketball into the hottest ticket in town in April.

Back-to-back sellout crowds of 12,000 at the Don Haskins Center witnessed a dramatic College Basketball Invitational finals match-up against Oregon State, which took the tournament crown by beating UTEP 81-73 in the deciding game three of the championship series.

Although the Miners fell just short of the CBI title, the squad gave fans plenty to cheer for as they dispatched Nevada, Northeastern and Richmond in their run to the finals.

The great postseason play punctuated the longest season in UTEP basketball history. The Miners played a total of 37 games in 2008-09, finishing 23-14. Third-year head coach Tony Barbee continues to build success, going from 14 wins in his first season, 19 in his second, to 23 in his third.

The Miners also said goodbye to a superstar and fan favorite, senior guard Stefon Jackson. Jackson ended his career as the all-time leading scorer for UTEP and Conference USA, with 2,456 points in the record books. He finished the season ranked fifth nationally in scoring, averaging 24.5 points per game.

Other standouts included sophomore guard Randy Culpepper, who set a school record of 170 career three-point field goals, and freshman forward Arnett Moultrie, who grabbed 302 rebounds, becoming only the third Miner to pull down 300 or more rebounds in a season.

The Miners return four starters for 2009-10 and will welcome several talented newcomers, including Arizona State transfer Christian Polk, Louisville transfer Derek Caracter, junior college import Myron Strong and high school phenom Marcus Ruppel.
Keep an eye on the story of UTEP co-head softball coaches Kathleen and James Rodríguez. It might turn into a Disney movie someday. All it needs is a “feel good” ending.

The coaches met when they were softball and baseball players at St. Mary’s University in San Antonio. James graduated in 1993 and Kathleen earned her degree the next year. They got married July 1, 1995. During the past 14 years, they have built successful softball programs at Schreiner College in Kerrville, Texas, and Eastern New Mexico University in Portales, N.M., before doing the same at UTEP starting in 2003.

Kathleen and James, who have three children—Ryan, 11, Aryn, 7, and Isabella, 2—have instilled a healthy “home away from home” atmosphere that extends beyond the dugout. “What parents appreciate is the fact that we like to treat all of our ballplayers like they are our own daughters,” Kathleen says. “Our relationships with the girls are not just student-athlete/coach relationships. We truly see them as an extension of our immediate family.”

That familial mood was the factor freshman utility player Chelsea Troupe says determined where she would play ball. “When I came on my visit, it was great. It was very family oriented. I felt comfortable knowing that if I ever needed anything, I had both of them to turn to,” the Oceanside, Calif., native says.

Known as “Momma Coach” and “Poppa Coach” to their players, the couple has seen gradual improvements in their teams. Last season, the Miners recorded a school-record 30 wins and claimed a victory in the Conference USA Tournament for the first time.

Kathleen repeats the highlights of the teams’ six seasons as if she was a mom turning pages in a scrapbook. The accolades include six Academic All-Conference honorees, nine conference players of the week and 14 all-conference selections, a Miners’ doubleheader sweep of fifth-ranked Arizona State in 2007 and a 9-6 victory over seventh-ranked Arizona in 2008.

The victories are vital, but having the players see a healthy relationship based on love and respect is just as significant. “It is important for them to see how fulfilled my life is, not only as a coach and mother, but also as James’ wife,” Kathleen says.

That sounds like a good place to end the movie—at least until the team wins a national championship.

Chelsea Troupe and Courtney Ware have gone from being rivals at one of the most competitive high school softball leagues in Southern California to teammates at UTEP.

The freshmen grew up in Oceanside, Calif., a beachfront community about 35 miles north of San Diego. Troupe attended El Camino High School and Ware went to Vista High School in the Avocado League.

El Camino defeated Vista en route to the CIF semifinals last year. Both were first team All-Avocado League honorees in 2008. “They were definitely our best competition,” Ware says.

The two utility players have known of each other for years because their mothers played on the same softball team. They took notice of one another as they matured in their sport. “I always knew (Ware) had presence,” Troupe says.

UTEP softball coaches learned about Troupe as they were recruiting Ware. Ware’s mother invited the El Camino graduate to join them for their visit to UTEP.

Troupe says that she was leaning toward signing with another school, but chose UTEP after the visit. “I was more comfortable at UTEP,” she says. The two committed separately, not telling the other. Ware committed first. “I saw her play and knew her skills, but I never knew how good she was until I got here,” Ware says.

Co-head softball Coach James Rodriguez says he is happy to have both Californians on the team. “They are both extremely mature,” he says. “They come in with a great sense and knowledge of the game.”

League of Their Own

by Angela Olivas

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When Dominic Tanui arrived at UTEP, he saw the beginning of a lifetime dream fulfilled. The freshman already understood the significance of wearing a Miner track and field uniform.

“I looked at other schools before applying at UTEP,” says Tanui, a native of Kenya. “But when I saw the history and tradition that UTEP had in training world-class athletes, I knew that this was where I wanted to be.”

In addition to its rich history, The University of Texas at El Paso also had another thing other schools did not—Paul Ereng.

As UTEP’s cross country coach, Ereng became a household name in Tanui’s homeland when he was the first Kenyan to win an Olympic gold medal in the 800-meter race at the 1988 Games in Seoul, South Korea.

“For me, that was a great accomplishment for the four guys,” says Ereng about the team: Dominic Tanui, Anderson Mutegi, Aggrey Chirchir and Nicole-mus Ng’etich.


Ereng also earned a total of three NCAA championships, four NCAA All-American honors and two World Indoor titles before transitioning to a coaching career.

Success followed Ereng as he trained young athletes from African countries at the International Association of Athletics Federations High Performance Training Center in Eldoret. Ereng’s runners won numerous medals at the 2001 African Junior Championships in Mauritius. In 2002, Ereng was appointed to head the Kenya World Junior Championships team, which finished second overall.

With a resumed filled with athletic and coaching achievements, Ereng was inducted into the prestigious Drake Relays’ Athletics Hall of Fame in 2004. The burning desire to win still fuels Ereng.

“That’s the quality of athletes we have on this team year in and year out. Now we have to carry that into our outdoor season,” Ereng says.

Ereng graduated from the University of Virginia in 1993 with a bachelor’s degree in religious studies and a minor in sociology. He and his wife, Fatuma, have three children: Jasmine, Victoria and Paul Jr.
Miner Investments

Stories by Laura L. Acosta

Students at The University of Texas at El Paso understand that a higher education is the best investment they can make.

Despite a challenging economy, UTEP continues to gain momentum in providing a quality, affordable education to a growing number of students.

This semester continues an upward trend in attracting and retaining students at UTEP, with a record spring enrollment of 19,156—an increase of nearly 2 percent over last year. This follows a record fall enrollment of 20,458.

UTEP is sensitive to our students’ financial challenges, and last year awarded $112 million in grants, scholarships, on-campus employment, departmental awards and loans. More than $8 million in merit-based scholarships helped talented students with the costs of tuition, books and living expenses.

Through the charitable contributions of UTEP supporters and friends—many of them alumni who understand the financial obstacles students must overcome—the University is helping thousands of Miners succeed.

Recognizing and Supporting Academic Potential

Patricia Villalobos fondly remembers the nights she spent watching her husband, Juan, play saxophone and sing in a band called Macho.

At the time, he was studying at UTEP to become a civil engineer, and working as a mechanic for the U.S. Border Patrol to pay for college. Patricia worked in the fabrics and linens section at The Popular department store.

In 1975, Juan accomplished an impressive feat: He earned his civil engineering degree in three years.

Today, the Villaloboses are the successful owners of Barnhart-Taylor, Inc., a manufacturer of heating, ventilation, and air conditioning equipment in El Paso. She serves as the company’s president and he as vice president.

But their success did not come easily. Patricia, who graduated from El Paso High School, and Juan, who graduated in the top 10 percent from Bowie High School, grew up in low-income neighborhoods, where they saw many students sacrifice their dreams of a higher education to help support their families.

“There is a lot of talent within our low-income neighborhoods,” says Patricia, co-founder of the Frontera Women’s Foundation, one of only two women’s foundations in Texas. “Students who cannot afford college may not have the access to a scholarship because they have to work, or their parents are not fluent in English and may not understand the scholarship process.”

As a way to help some deserving Miners reach their academic potential, the Villaloboses have established the Juan M. and Patricia Villalobos–Greater Texas Foundation Removing Educational Barriers Endowed Scholarship at UTEP.

The couple’s $50,000 gift was matched with a $50,000 contribution from the Greater Texas Foundation. The endowment will provide need-based scholarships for full-time undergraduate students at UTEP who demonstrate financial need. The first scholarships are expected to be awarded in 2010.

“As our parents came to the United States to give us the opportunity for a better education, we feel it is important to give back and help give some of these students the opportunity for a higher education,” Patricia says.

High school sweethearts, Juan and Patricia have been married for 35 years. They are the proud parents of three sons; Juan Jr. and Enrique Villalobos, both UTEP graduates; and Ruben Villalobos, who is currently pursuing his bachelor’s in multidisciplinary studies at UTEP.

Ruben Villalobos says his parents’ story makes him appreciate his education even more. “It’s a good feeling to know that you come from a place of high honor. They are people who took control of their destinies and made themselves into who they are today,” he says.
When Hughes Butterworth, Jr. passed away in late December 2008 at the age of 77, he left behind a distinguished legacy of philanthropy and service to The University of Texas at El Paso and the El Paso community.

Remembered by family and friends as a man of faith who led by example, Butterworth never forgot the opportunities afforded to him by his alma mater, Texas Western College (now UTEP), says his widow Sharon Butterworth.

"Hughes always felt that the University had such a huge impact on his life," she says. "He also felt the University had a huge impact on our city."

The Butterworths established the Butterworth Family President's Leadership Award in the College of Science; the Hughes Butterworth, Sr. Memorial Library Fund; the Hughes Butterworth, Jr. and Family Presidential Leadership Fund; and they arranged a deferred gift to UTEP as part of the Legacy Campaign.

Their contributions are making a difference for scholarship recipient Laura Zambrano-Vazquez, a 20-year-old psychology major.

"The scholarship was one of the deciding factors that made me want to come to UTEP," she says. "The scholarship has really helped me to focus on my studies. I am completely grateful."

Born in Newport News, Va., in 1931, Hughes Butterworth at age 10 moved with his family from Jackson, Miss., to El Paso, where his father was employed with Southwest Irrigated Cotton Growers Association.

After graduating from Austin High School, Butterworth enrolled at Texas Western. He earned his bachelor’s of science in biology in 1954 while working part time for Southwest Title Co.

Butterworth continued his career in the insurance industry, and opened Lawyers Title of El Paso in 1974.

As his success grew, Butterworth was determined to give back to the community through service and charitable contributions, often shying away from any recognition.

Butterworth served on numerous boards for local organizations, including the UTEP Development Board, the College of Science Advisory Board and the Friends of the Library Board.

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Charitable Gift Annuity

"A gift annuity is a win-win-win. First, you give back for the education received at UTEP. Then, as we did, you can establish a professorship, which provides for the future of UTEP. Third, you earn personal income, which is partially tax exempt."

— Ralph Ponce de Leon, UTEP Class of ’60; Distinguished Alumni Award, 2003; member, UTEP Development Board

Lifetime Payments
The charitable gift annuity generates fixed payments to you (and/or someone you designate) for life and ensures a significant gift to UTEP at your death. The amount you’ll receive is determined by the amount you contribute and your age at the time of your contribution.

Your Tax Benefits
You may create a charitable gift annuity with a gift of cash, marketable securities or other property. Because we are a charitable organization, gifts made in exchange for a gift annuity are eligible for a charitable income tax deduction for a portion of the amount contributed in the year the gift annuity is created.
Many UTEP students—often the top high school graduates in the region—have substantial financial need.

Generating private support is critical to UTEP's mission of providing access and excellence in higher education for all students. This is especially true in the current economic environment as the need to increase scholarship support for deserving students is more necessary than ever.

The very definition of the word “scholarship” embodies what the college experience is all about—“learning, knowledge acquired by study, the academic attainments of a scholar.”

Recognizing the importance of helping deserving students, UTEP understands that it must consistently be in a position to offer its students greater financial support than is available to them through need-based financial aid. Thanks to the generous support of our alumni and friends, UTEP awarded $8.4 million in scholarships to more than 2,000 students in 2007-08.

As we prepare to welcome the 2009 freshman class, more than $2 million in four-year scholarships have been offered to 142 students. However, the needs of our students are greater than the scholarship money we have available. Expanded undergraduate enrollment, coupled with ongoing economic volatility, has made it imperative that we increase private support for scholarships.

There are many reasons that motivate our friends and alumni to generate scholarships, including:

• UTEP’s commitment to provide a quality higher education to residents of the Paso del Norte region, regardless of their economic background.
• Private support for scholarships helps supplement student financial aid.
• Scholarships awarded on the basis of merit attract and graduate the most talented and highly motivated students.

Your generosity can help UTEP students receive the quality education they deserve, allowing them to pursue their aspirations and dreams.

The annual UTEP Scholars Luncheon celebrates the academic excellence of students by bringing together scholarship donors and recipients.

“We thank you, our donors, for helping make our students’ dreams a reality and encouraging other young people in El Paso to dream of following in these UTEP students’ footsteps,” says University President Diana Natalicio.

UTEP awarded $8.4 million in merit-based scholarships in 2007-08, and already has offered more than $2 million in four-year scholarships to the 2009 freshman class.

Among the outstanding Miners whose achievements were highlighted in this year’s Scholars Luncheon are Monica Pineda, a political science major; Philip Romike, a civil engineering senior; and Erin Eastman, a nursing student.

Pineda, 20, is the first recipient of the Judge Enrique H. Peña Endowed Scholarship. An aspiring lawyer, Pineda has maintained a 3.95 GPA while taking a full course load, working part-time, and interning 20 hours per week at Texas Rio Grande Legal Aid.

“My education has always been my priority and I did not want to postpone any of my goals due to a lack of income,” says Pineda, who will graduate summa cum laude this spring.

Philip Romike, 22, began studying civil engineering at UTEP in 2004, after he graduated from the engineering magnet program at Capt. John L. Chapin High School. In 2007, he received the Huitt-Zollars Endowed Scholarship for the College of Engineering.

Romike, who graduates this May, has a 3.46 GPA and says his scholarship not only relieved some of the financial burden of paying for school, but also motivated him to excel in his course work.

Erin Eastman received the J. Leighton and Virginia Green Endowed Scholarship for Health-Related Professionals when she enrolled at UTEP three years ago.

Eastman, 22, will graduate from UTEP this spring and has a 3.69 GPA, a feat she accomplished while working part time and playing the cello with the University Symphony Orchestra.

“Receiving this scholarship has facilitated my education in so many ways,” she says. “It allowed me to explore the many different opportunities the University has to offer.”

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Romike, who graduates this May, has a 3.46 GPA and says his scholarship not only relieved some of the financial burden of paying for school, but also motivated him to excel in his course work.

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Eastman, 22, will graduate from UTEP this spring and has a 3.69 GPA, a feat she accomplished while working part time and playing the cello with the University Symphony Orchestra.

“Receiving this scholarship has facilitated my education in so many ways,” she says. “It allowed me to explore the many different opportunities the University has to offer.”

The annual UTEP Scholars Luncheon celebrates the academic excellence of students by bringing together scholarship donors and recipients. “We thank you, our donors, for helping make our students’ dreams a reality and encouraging other young people in El Paso to dream of following in these UTEP students’ footsteps,” says University President Diana Natalicio.

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Scholarship Support

There are many ways to support UTEP student scholarships, including an annual gift or by establishing a named scholarship endowment.

To learn more, contact the Development Office at 915-747-8533, or visit www.utep.edu/givingto

L-R: Erin Eastman, Monica Pineda and Philip Romike

Photo courtesy of UTEP Office of Scholarships

Outstanding Scholars

by Laura L. Acosta
Dear Alumni,

During the past year, the UTEP Alumni Association has been actively engaged in developing programs, services and benefits for alumni.

I am proud to say that we have established Miner Notes, an electronic newsletter to keep alumni connected and informed on what is happening on campus and throughout the nation. Our intent is to communicate with each of you via e-mail regularly, so that you know the inner workings of campus activity and the alumni association. If you haven’t received the newsletter, please visit www.utepalumni.org and update your contact information.

I would like to recognize our alumni volunteers who do an outstanding job in representing UTEP. Led by Henry Quintana Jr., association president, the group has been very active in developing strategic plans for future growth. As we celebrate National Volunteer Month, it is imperative that we thank those volunteers [board members, chapter officers, committee chairs and committee members] who give of their time and talent to serve this great University. Without the support of our dedicated volunteers, we would not be as successful. Their input as experienced community citizens and their engagement as volunteers and advocates are critical to the well being and growth of this institution.

Lastly, I want to encourage alumni to engage with your colleges and schools to find out what is happening and how you can contribute to their success. Representatives from the College of Engineering and School of Nursing are working to identify interested alumni who would be willing to serve on their new college/school-based alumni chapters. This represents an excellent opportunity to be part of a new and exciting era.

As we move forward in building the Miner Nation through partnerships and collaborations, it is important that we continue to display the pride, passion, and loyalty to UTEP so that we can generate support and elevate the presence of this great University.

Richard Daniel, Ph.D.
Assistant Vice President for Alumni and Constituent Relations

The Miner Ambassadors

by Cindy Ramirez

As an ambassador for The University of Texas at El Paso, junior microbiology major Ana Maria Garcia says she does more than represent the Miner Nation.

“Aside from telling others about UTEP and spreading the message of our success, we are trying to better the experience of students and help UTEP become a stronger institution,” says the 20-year-old Garcia, who is pursuing a double minor in chemistry and Spanish.

Garcia is a member of the Miner Ambassadors, an elite group of dynamic students who serve as a voice for the University by volunteering as tour guides and hosts at special events and speaking with key community supporters about UTEP, its vision, mission, goals and history, and their experiences as Miners.

“Our hope is that the Miner Ambassadors will leave on our guests a lasting impression which reflects the quality of our students,” says Richard Daniel, Ph.D., assistant vice president for alumni and constituent relations.

Numerous departments and colleges across campus have similar groups of student advocates, with their roles often focusing on recruitment efforts. Across the nation, universities are increasingly forming student ambassador groups to assist in recruiting, awareness and public relations efforts.

As Miner Ambassadors, these top students also help put a face to the stories of success that are representative of the quality of education UTEP offers.

Selection criterion includes being classified as a sophomore or higher and having a 3.0 GPA or better. Ambassadors learn about the University history and heritage, its academic and research portfolio, as well as team building and leadership skills. Students serve one academic school year.

In turn, Miner Ambassadors are offered the opportunity to meet alumni, dignitaries and special guests, as well as professionals in their fields of interest, Daniel says.

“I hope that their experience as a Miner Ambassador will instill in each one of them their commitment and passion for UTEP and their lifelong connection to the University,” Daniel says.

That connection already has been strengthened in graduate student Sergio Magaña.

“I have been exposed to the great and ambitious projects that UTEP has committed for itself for the next decade,” says Magaña, 23, who’s pursuing a master’s in sociology.

“It makes me very proud to see how much the University is striving for national recognition and showing the country what we have known all along: That UTEP is a great institution with world-class research, faculty and students.”

2008-09 Miner Ambassadors

Virginia “Genie” Bustos
Senior, Early Childhood Education

Miguel A. Cervantes
Master’s, Public Health

Ana Maria Garcia
Junior, Microbiology-Chemistry and Spanish

Rebecca R. Hernandez
Junior, Nursing

Sergio Magaña
Master’s, Sociology

Anna C. Montes
Senior, Special Education

Anna C. Ortiz
Sophomore, Biology and Chemistry

Nina R. Ortiz
Sophomore, Biology and Chemistry

Angel Pineda
Senior, Nursing

Danielle Riddick
Junior, Early Childhood Education

Aaron Z. Rosas
Master’s, Public Administration

Kira Lise Silva
Sophomore, Mechanical Engineering
'50s

Rosa E. Guerrero (B.A. ’57; M.Ed. ’77) in October was awarded the 2008 Seniors’ Choice Award for Best Older El Pasoan Who’s Made the Most Difference by the El Paso Southwest Senior newspaper.

'60s

Abel Aldaz Jr. (B.A. ’67), a resident of Midwest City, Okla., serves on the board of directors of the Retired and Senior Volunteer Program of Central Oklahoma and as a consultant to the Oklahoma City Arts Council.

'70s

Dr. Melvyn R. “Mel” Goldberg (B.S. ’71) recently completed his 30th year practicing and directing emergency room medicine in the Cardinal Glennon Pediatric Emergency Department of St. Anthony’s Medical Center in St. Louis.

Manuel D. Gomez (B.S.Ed. ’75; M.Ed. ’78) is a senior consultant with MGT of America Inc., a national management research and consulting firm. Gomez resides in Flower Mound, Texas.

'80s

Edward J. Huskinson Jr. (M.S. ’75) in November was appointed the permanent project geologist for Hunt Gold Corp. Huskinson resides in Kingman, Ariz.

Manuel A. Perez (B.S.E.E. ’75) was named energy management coordinator for El Paso Water Utilities in November.

Bill C. “Billy” Taylor (B.S. ’71) was named senior vice president and head of the Relationship Management and Strategic Alliances Group in the United States for Pioneer Investments, a global investment firm in Boston.

Luis V. Valdes (B.S. ’77) is the founder and chief executive officer of Performance Vertical Consulting LLC, a performance and talent management firm in Atlanta.

'Daniel Avila (B.S.C.E. ’83), a professional engineer, was named chief technical officer for El Paso Water Utilities in December.

David Barron (B.A. ’82) retired in April 2008 after 38 years of combined military and federal civilian service, most recently as a supervisory technical writer-editor for the U.S. Army.

Musette Bracher (B.B.A. ’84), vice president of marketing for El Paso credit union GECU, in October received the Marketer of the Year award from the Texas Credit Union League in recognition of her outstanding work in credit union marketing and communications.

John R. Burley Jr. (B.S. ’81) works for PPG Aerospace in Huntsville, Ala., as a glass technician building aircraft cockpit windows.

Sergio Franco (B.B.A. ’84) in August was named vice president of finance at Engineered Materials, Interconnects and Packaging, a division of AMEtek Inc., in Wallingford, Conn. AMEtek is a global manufacturer of electric motors and electronic instruments.

Mark E. French (B.A. ’85) in October was named managing partner and president of GreyTel LLC, a Houston-based petroleum engineering, operations and consulting firm.

Francisco T. Hernandez (B.A. ’89) in August was a member of the Marrieta City Council Historic Preservation Advisory Commission in California.

Lt. Col. Anna E. Hofer (B.A. ’83), who is retired from the U.S. Army, is a second-grade teacher in the Comal (Texas) Independent School District. Hofer resides in Spring Branch, Texas.

Gregory M. “Greg” Morris (B.S.N. ’82) is the assistant program director of the Certified Registered Nurse Anesthetists Program at the University of South Florida, where he is pursuing a doctor of nursing practice degree. Morris also is the administrator of anesthesia at the James A. Haley Veterans’ Hospital in Tampa.

Lt. Col Jose A. “Tony” Solis Jr. (B.S. ’83), who is retired from the Air Force, is a 737 captain for Alaska Airlines in Seattle.

Clifford L. Williams (B.A. ’80), a resident of Baton Rouge, La., is a division director for the Louisiana House of Representatives.

'90s

Jan B. Beck (B.S. ’99; M.S. ’01; Ph.D. ’04) is the lead research scientist for El Paso-based technology development company X-L Synergy, which specializes in electrical fault and safety technologies. In November, Beck was awarded the Society of Automotive Engineers’ Arch T. Colwell Merit Award for a paper he co-authored on an alternative approach to arc detection in fault circuit breakers.

Ismael Berumen (B.B.A. ’94), a resident of Houston, was elected to the partnership at KPMG LLP, a Big Four accounting firm.

Miguel Angel Cervantes (B.B.A. ’98; M.S. ’02) is a mining survey coordinator for the Fraser Institute – Center for Trade and Globalization Studies in Toronto.

Stephen A. Engel (B.B.A. ’90), in January, was promoted to vice president of Romanyak Consulting Corp., located in Plano, Texas.

Marcos Medina (B.S.C.E. ’99), vice president of Moreno Cardenas Inc. in El Paso, received the 2008 Young Engineer of the Year Award in November from the Texas Society of Professional Engineers – El Paso Chapter in recognition of his contributions to the engineering profession and his technical career achievements.

Ada L. Mercado (B.S.W. ’94), a social worker, is one of the longest-serving employees at Hospice El Paso and was named clinical employee of the quarter in November.

Gabriel S. Perez (B.B.A. ’97; M.B.A. ’01) graduated in December from the Texas Tech University School of Law in Lubbock, Texas, and served as the student speaker for the commencement ceremony.

'00s

Liliana Cordero (B.A. ’06) was crowned 2009 Miss Hispanic Lubbock in September. She received her M.A. in clinical psychology from Texas Tech University in December and is enrolled in the Clinical Psychology Ph.D. Program, where she holds a Chancellor’s Fellowship.

Grisel Adriana Del Hierro (B.S.E.E. ’05) is a project engineer for Barton Malow Co., a construction management and general contractor firm in Tempe, Ariz. In November, she earned her LEED (Leadership in Energy and Environmental Design) professional accreditation, verifying her proficiency in green building practices and principles.

Jimena L. Enriquez (B.S.I.E. ’05) graduated in December from Arizona State University in Tempe with a master’s in engineering. She also earned a Six Sigma Black Belt certificate and a certificate in statistics.

Audrey N. Garcia (B.A. ’05) was promoted in October to account executive at The Laster Group, an integrative marketing and communications firm in El Paso.

Victor Guerrero Jr. (B.A. ’04) is the marketing and cultural tourism coordinator for El Paso’s Museums and Cultural Affairs Department.

David C. Nemir (M.B.A. ’05) is president and founder of X-L Synergy, an El Paso-based technology development company that specializes in electrical fault and safety technologies. He received the Arch T. Colwell Merit Award from the Society of Automotive Engineers in November for a paper he co-authored that presents an alternative approach to arc detection in fault circuit breakers.

Orlando J. Osuna (B.S.C.S. ’00; M.S. ’03) is a software engineer at Sandia National Laboratories in Albuquerque, N.M.

Christa N. Talamantes (B.A. ’01) is the supply coordinator and safety officer for Hospice El Paso. In February, she was recognized as non-clinical employee of the year.

Victor Zavaleta (B.A. ’06), a lab assistant at El Paso Community College, won first place in an art contest to create renderings of the Virgin of Guadalupe. The Guadalupana Association of Our Lady of Guadalupe Church presented Zavaleta the award for his piece titled Southwest Eyes.
Richard Hinojosa
(B.S.Ed. ’82) El Paso; April 14, 2008.

Rod Allen Rodrick

Nancy Jean Hall

Charlene Brown

Janette W. Simms

Sandra Ann Fowler
Ross (B.A. ’58) Fort Worth, Texas; Oct. 5, 2008.

Claire R. Villalba

Carl Cotton Jr.
(B.S.Ed. ’68) Silver City, N.M.; Oct. 9, 2008.

Jackie Lee Spradley

Robert “Reed” Thomson

Robert James “Bob” Keith

Albert Joseph Renaud Sr.

Toby H. Tovar Jr.

Armando Flores

Ernesto Monico Fernandez

Carlos F. “Charlie” Arciniega

Dr. Christine Pasanen Morris

Woodrow L. Wilson


Janet Ruth Moore Gates

Leroy Edward “Ed” Wheeler

Theodore Dale “Ted” Johnson

Sylvia B. Rivera
(B.S.W. ’94) El Paso; Nov. 4, 2008.

William E. “Bill” Rodriguez

Joel T. Delgado

Donald Wilfred Moilan

David Paul “Dave” Leibson
(B.S.Ed. ’74; M.A. ’79) Austin, Texas; Nov. 9, 2008.

Jean Frances Hale
(B.S.Ed. ’70) Midlothian, Texas; Nov. 10, 2008.

Marcy Ann Aboud
(B.S.Ed. ’75; M.Ed. ’79) El Paso; Nov. 12, 2008.

Rafael Ortega (*) Canutillo, Texas; Nov. 16, 2008.

Natividad “Nat” Campos Jr.

James Joseph Kampa
(B.S. ’95) Lawton, Okla.; Nov. 17, 2008.

Vincent Anthony Norwood
(B.S.W. ’91) El Paso; Nov. 17, 2008.

Katherine Lewis Vandenburg

James L. Morris

John Morgan Broaddus Jr.

Robert M. “Bob” Suddarth

Roger Lujan

George Joseph


Edward P. Hollins Jr.

Clinton Conger “Clint” Ballard Jr.

Hughes Butterworth, Jr.

(*) Denotes attendance

–Compiled by Alyson Acheson

Mary Bernice Carpenter Green: A longtime UTEP benefactor, Carpenter Green died Dec. 24, 2008, at the age of 92. She was valedictorian of Ysleta High School’s Class of 1933, but could not attend college because of the Great Depression. She met her future husband, John Milton Green, at a dance in 1938 and the couple married the next year. They were staunch UTEP supporters and created two endowed scholarship funds for the College of Liberal Arts.

Jackie Roe Williams: The former Texas College of Mines professor and philanthropist died Jan. 10, 2009, at the age of 90. She joined the music faculty in 1939 and married her husband, future El Paso mayor, Judson F. Williams, Ph.D., in 1941. A recognized soprano who was known for her style and grace, she helped numerous civic groups, especially music organizations, and UTEP. The couple created the Dr. Judson F. and Jackie R. Williams Presidential Leadership Fund through a deferred gift.

Elayne Sylvia Plous Bernat: A devoted friend to UTEP for many decades, Bernat died Nov. 27, 2008. She was 91. She and her husband, Julian, contributed their time, talents and resources to improve the University since they arrived in El Paso in 1944. The couple established two presidential endowments, four scholarship funds and arranged a deferred gift that will benefit the School of Nursing.

Hughes Butterworth, Jr.: Butterworth passed away Dec. 29, 2008, leaving behind a legacy of philanthropy and service at UTEP, his alma mater. He was 77. He earned his bachelor’s degree in biology from Texas Western College (now UTEP) in 1954. The successful businessman served on various UTEP boards and supported its academic and athletic programs throughout the years. He and his wife, Sharon Butterworth, established numerous awards, funds and scholarships at the University.
More than 40 teachers and staff at Mitzi Bond Elementary, all UTEP graduates, show off their Miner pride alongside the UTEP cheerleaders and Paydirt Pete.

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ACROSS
1 Bilingual education conference
2 Medical school-bound kinesiology major: ___ Ramos
3 Former athletic conference
4 Once a Miner, ___ a Miner
5 College of ___ Arts
6 UTEP graduate
7 Texas State School of Mines and ___
12 Professor Robertson: AKA Dr. ___
13 ___ Makeover
16 UT System faculty retention program
17 Top Miner women’s rebounder: ___ Williams
19 Federal agency awards UTEP bioscience grants
20 VP of Research: Roberto ___
21 TWC alumnus, donor: Hughes ___
23 Bioscience ___ Building
25 “Join the Miner ___”
26 U.T. System faculty retention program
27 ___ Share Center of Excellence
28 Manipulation of matter at atomic level: ___ technology
29 ___ Technology
30 Alzheimer’s researcher: Donald ___
31 Post-bachelor’s school
33 Breakfast of Champions
34 Two-time C-USA Conference Player of the Year: Jareica ___
35 Liberal Arts majors in 1920s
36 High degree offered
37 Arab country in Syrian desert
39 Intercollegiate athletics director: Bob ___
40 University acronym
41 Powerful, fast mainframe: ___ Computer
42 W.M. ___ Center for 3D Innovation
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45 Hispanic Health ___ Research Center
46 Rio ___ Wetlands
47 ___Wetlands
48 UTEP Executive VP Richard ___
49 UTEP radio station

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47 Biological Sciences Chairman Robert ___
48 UTEP Executive VP Richard ___
49 Rio ___ Wetlands

Answers on page 59
It has been more than two decades since scientists began pursuing a vaccine for HIV, a virus that has killed more than 25 million people worldwide since 1981, according to United Nations estimates.

But producing an effective vaccine has been a difficult task because of the nature of HIV—it evolves in an infected individual, eluding the body's immune response.

"The virus is a quick-change artist. It reinvents itself," says UTEP Professor of Biological Sciences June Kan-Mitchell, Ph.D., who is using a new strategy for developing an HIV vaccine.

She is investigating ways to make T cells—a white blood cell that plays a major role in the body's immune response system—"target the portion of HIV that cannot change," she says. Her HIV research is supported by $4.8 million in highly competitive R01 awards from the National Institutes of Health.

Kan-Mitchell earned her bachelor's in biochemistry from Smith College in 1971. In 1977, she received her Ph.D. in Pharmacology from Yale University, where she completed a postdoctoral fellowship in 1978.

Kan-Mitchell, who has three decades of experience as an immunologist and cancer researcher, came to UTEP in 2007 after several years at Wayne State University in Michigan.

"The warm weather of El Paso," was an attraction, she says with a smile. But she also was enticed by the research opportunities available in UTEP's growing biomedical sciences program, as exemplified in the new $45.1 million Bioscience Research Building, where she conducts her work.

"I respect President Diana Natalicio's vision of UTEP as a research university," she says. "Also, I was impressed with Dr. Robert Kirken (Department of Biology chair and program director of the Border Biomedical Research Center), who recruited me—he is on the right track."