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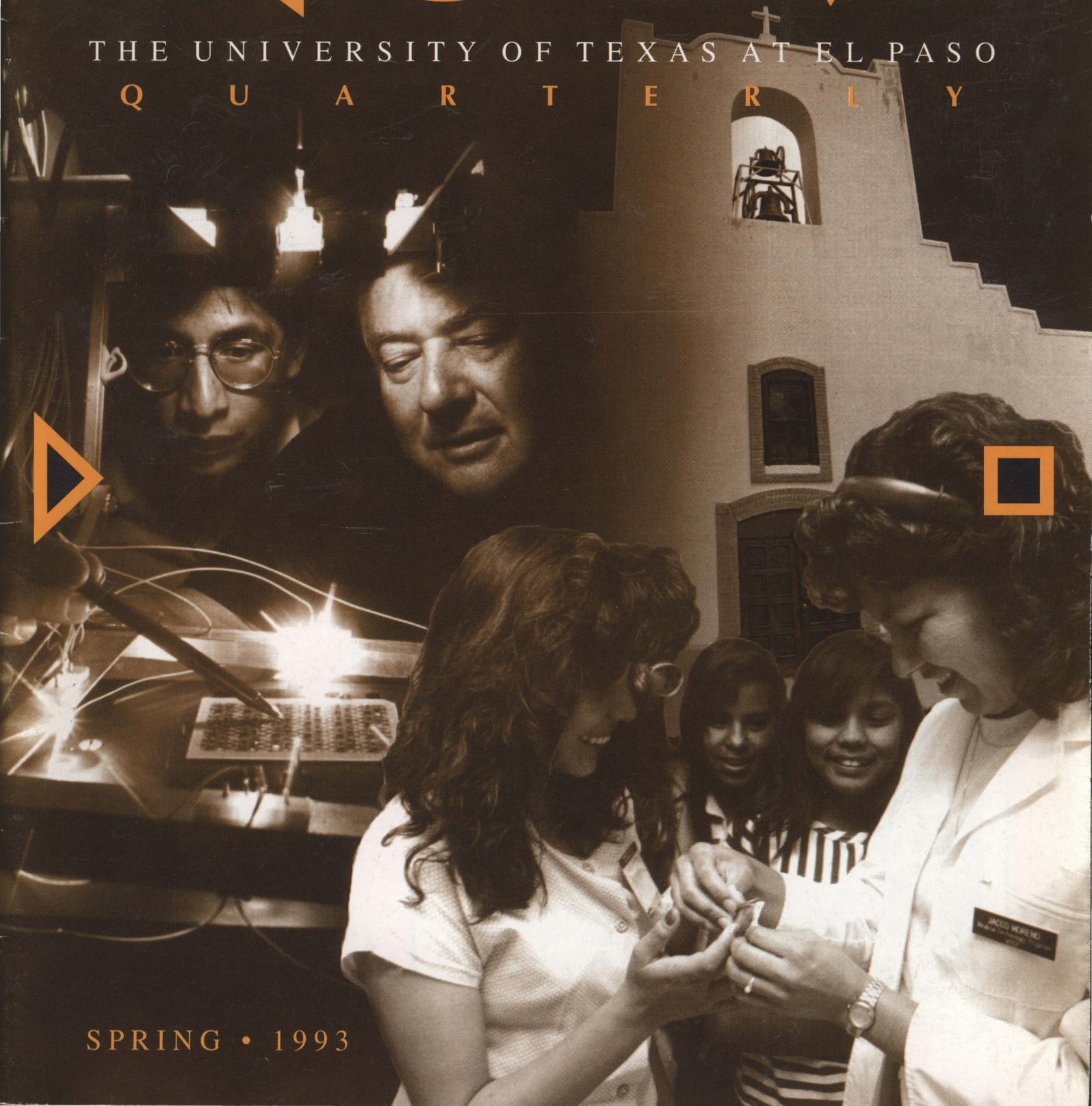
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NOVA

THE UNIVERSITY OF TEXAS AT EL PASO
Q U A R T E R L Y



SPRING • 1993

FROM THE EDITOR

Education is not an expense, it's an investment. This is a tough line to sell, especially during hard economic times and rising government deficits. Opponents of government spending can easily dismiss the concept as another tax and spend euphemism. The bottom line is that state tax dollars for higher education are an expense on the accounting ledger. No argument there. The real question is, "What do you get for your money?"

For communities like El Paso, which often see themselves ignored by lawmakers east of the Pecos, every state dollar flowing into the region has to be squeezed and stretched in ways that challenge the imagination. By necessity the art of leveraging the biggest bang for the buck has become a way of life on the border. At UTEP, this means using education as a catalyst for meeting other community social needs. It is not an easy job considering the state provides only \$43 per capita to universities on the border compared to \$103 for those in the rest of Texas.

Using a strategic approach that is redefining the role of universities, UTEP is winning national recognition for innovating solutions that stimulate community development. UTEP is changing the way health care professionals are educated and trained, assisting in small business development, and introducing manufacturers to technologies that increase industrial productivity and reduce manufacturing costs. UTEP is also building partnerships to reform the area's education system and to help heal the environment.

Beginning with this issue of *NOVA* and continuing with our summer edition, we will look at UTEP education initiatives targeting border health, economic development, public education, the environment and life-long learning. We will look at how UTEP responds to community needs in ways that benefit students and El Paso residents—multiplying the impact of every dollar spent.

Perhaps state legislators are already seeing the wisdom of increasing support for universities like UTEP. In February, the Texas Senate Finance Committee proposed a \$318 million package for university capital and academic programs along the Texas-Mexico border. Money for building and renovation would be raised through tuition revenue bonds while program dollars would come from general revenue funds. UTEP would get \$23 million for construction, including a classroom building, and \$10 million for academic program development in the 1994-95 biennium.

The Texas House of Representatives is considering a similar proposal, but instead of using tuition revenue bonds for capital projects at UTEP and UT San Antonio, the House version would use the Permanent University Fund (PUF) to finance construction. UT System officials, however, say there isn't enough money in the PUF to finance the Texas border university initiative. Reconciling the differences between the two legislative bills is expected to be difficult.

If the legislature does find a way to provide the proposed funds to UTEP, Texas could multiply its money. UTEP currently leverages a \$97.5 million budget with only a 38 percent share from the state. That is a big return on investment. The greater long term result is the improved quality of life for people on the border.

—Arturo Vásquez

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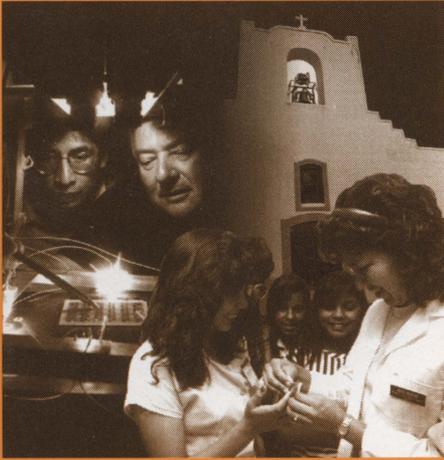
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NOVA

Spring 1993



On the cover:

UTEP links to El Paso include (among others) health and applied research projects benefiting rural communities and area industry.

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The UTEP machine vision lab, operated by Dr. Carroll Johnson with student research assistants, is one of the many technical resources available to area manufacturers.

Along the Carlsbad highway east of El Paso, cluttered auto salvage yards, mobile homes, an adult drive-in movie theater and tawdry taverns punctuate the surrounding khaki-colored desertscape. On a dusty corner along the blacktop 25 miles from downtown El Paso sits a cluster of buildings anchored by Pete & Bros. Grocery. Several years ago, the proprietors decided to lease out a building at the rear of the compound to a man intent on opening a pub to cater to local residents.

Longtime resident Lelia Onsurez was convinced the last thing the isolated, working class community of Montana Vista needed was a saloon. Furthermore, she knew the low-slung, cinderblock edifice was the only place in the community of 12,000 suitable to housing a health clinic that grant money could make a reality.

Onsurez and several colleagues presented the grocery store owner with 350 protest signatures and pressured him to cancel the lease agreement with the tavern operator who had gotten behind in rent. Thus, the Centro Educacional de Salud was born. Health care had finally

working with neighborhood schools and community leaders.

Onsurez, a mother of three who was one of 10 original Montana Vista volunteers trained by UTEP nursing and allied health instructors, has seen first-hand the program's impact on area residents. She recalls one incident that occurred not long after the health clinic opened.

"There was a lady whose baby had diarrhea and she didn't have a car to get to a doctor or the money to buy medicine in Juarez," Onsurez says. "Leonor (Nuñez) from the clinic found transportation to take her to the doctor.

"Lots of people don't have access to medical care or don't know where to go to get medical care. This project has given us the confidence to ask for services. Before, we begged; now we demand services. And, we know now we need to be educated about health issues and learn to do more for ourselves."

Lack of ready access to health services is just one of the major obstacles to good health facing residents in El Paso County's low-income neighborhoods where the only health

Health Outreach Revitalizes Rural Communities

by Robert McCorkle

arrived in Montana Vista. And not a minute too soon for its low-income residents who are 15 miles away from the nearest medical services.

The opening of the health center was made possible by funds from a \$1 million W. K. Kellogg Foundation grant to UTEP to implement a three-year project to promote health careers, provide basic health education and health services, and train volunteer community health workers. Now in its third year, the "School-Centered Health Education and Services for Rural Communities" program has proven a huge success in

professional for miles around typically is the school nurse. Because of its border location and high poverty rate, county residents struggle with a variety of health problems that include one of the state's highest rates of tuberculosis, a higher-than-average incidence of congenital syphilis in newborns and high incidence of environmentally-related diseases such as upper respiratory infections and intestinal illnesses. Through innovative projects like the rural, school-centered health program, UTEP health educators are acting on their community-based pri-

Photo by David Flores





*Vital Links in the Health Care Chain
– The interdisciplinary approach to
providing El Pasoans with health
services and education is reflected in
this dynamic Border Community
Health Institute team.*

*Pictured (from left) are: Angie Acosta
Lizama, a community health worker;
Patricia Reatiga, a UTEP nursing
student; Leonor Nuñez, a nurse
practitioner; and Dr. Manny de la
Rosa, an El Paso physician who
serves with the Institute.*



Photo by David Flores

Volunteer community health worker Yvette Martinez (left) explains the range of available social services to a Montana Vista mother who sought assistance at the Kellogg-funded Centro Educacional de Salud in far northeast El Paso.

mary health care philosophy that emphasizes preventive medicine, education and self-awareness.

Pat Castiglia, dean of the College of Nursing and Allied Health, says the traditional model of nursing and health education has emphasized hospital-oriented training that involves treating acute illnesses. But, she adds, times are changing.

"The bulk of graduate nurses go into tertiary care (treatment of more serious health problems) in hospital settings, which is fine and good. However, when you look at the population, that's only a small percentage of the need. The greater need is in primary health care."

UTEP President Diana Natalicio agrees.

"Our response to community health needs is a very different way, indeed, of doing university business. As a result, thousands of *colonia* residents who live in communities underserved by medical and health facilities now have access to basic health services thanks to UTEP

programs," Natalicio points out.

Pete Duarte, the interim chief executive officer of Thomason Hospital, has noticed a "dramatic shift" in the UTEP nursing school's approach to health instruction.

Observes Duarte: "They're making nurse education more realistic in light of the expectations of low-income communities. UTEP is beginning to raise the consciousness of people who heretofore never thought about their health care status. The college of nursing also is doing a fantastic job of meeting the professional health needs of the community through clinical rotations in areas of need and through the addition of programs that are making it possible for nurses to stay in the community to get their provisional degrees."

Health professionals lump under primary care such things as health education, illness prevention, immunization, physical assessments and screenings for high blood pressure, diabetes, glaucoma, heart disease and the like. It is primary care and self-

awareness that hold the key to community health outreach programs like the Montana Vista project. The foundation upon which the program is built, however, is the cadre of dedicated volunteer community health workers who provide the manpower and cultural link essential to reaching their neighbors with information that promotes good health.

Volunteer Community Health Workers Key Link in Service Chain

During the past two years, the "Neighbor Helping Neighbor" program has trained more than 100 community volunteers in Montana Vista, San Elizario and Canutillo. They receive classroom instruction in health education and are supervised in the field. Volunteers play a crucial role in the community – visiting area residents to check vital signs, treat minor accidents at home, teach proper nutrition and refer those needing more sophisticated medical treatment or social services to the proper source.

In San Elizario, UTEP has used Kellogg grant money to open a health center staffed by a UTEP nurse and students who train volunteers to perform similar community health education outreach in the *colonias*. Donald Harrison, a UTEP adjunct faculty member, is the community health nurse who runs the clinic.

"The idea behind the program," Harrison explains, "is to increase self-awareness, self-esteem in the trainees so they become self-empowered to help themselves and their family, and in the long run, the community."

Last year when a case of cholera was confirmed in Juarez, the El Paso City-County Health and Environmental District launched an educational campaign to inform residents of Lower Valley neighborhoods that lack city water and sewerage of the significant health hazard posed by contaminated water. Eight of Harrison's trained health volunteers hit the streets to spread the word about the disease and to urge precautionary measures.

Creative Health Education Options Bridge Academic/Geographic Boundaries

by Robert McCorkle

Dan Miller, a UTEP computer technician, keeps an eye on two rows of monitors showing simultaneous classroom activities at UTEP and the University of Texas Health Science Center in Houston. It's all part of a new interactive video course on public health that allows graduate students in El Paso to participate actively in a biometrical statistics class being taught in a Houston classroom.

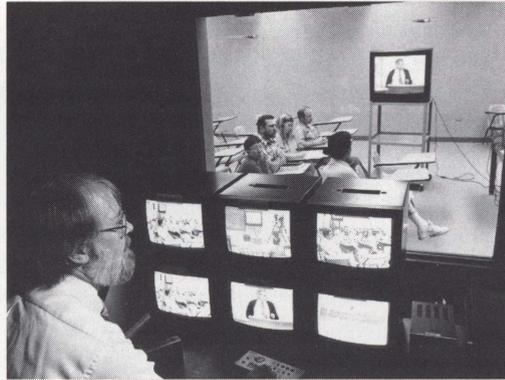


Photo by David Flores

In February, 10 recently trained community health workers began canvassing San Elizario neighborhoods to check residents for early signs of diabetes. The goal of the Adult Onset Diabetes Screening Program is to screen 1,200 at-risk persons for Type II, or non-insulin dependent diabetes, before June.

Health Clubs Reaching Kids

Another important component of the \$1 million Kellogg project involves the promotion of health careers to students in elementary and middle schools. Health clubs have sprung up at schools all around El Paso to inform children from low-income families about career opportunities that exist in the health profession. Activities include classroom lessons, assisting school nurses at school clinics, field trips to area health agencies, role modeling and mentoring by UTEP nursing and allied health students assigned to clinics and schools, and a Career Day visit to the College of Nursing and Allied Health.

UTEP Health Sciences major Claudia Rodriguez is paid under the Kellogg grant to work with Health Club students at East Montana Vista Middle School in the Clint Independent School District. She uses board games, role-playing and other creative means to keep the youngsters entertained while she imparts information about good health practices, lifestyle choices and health careers.

"The goal," the Socorro native explains, "is to try to get them interested in being health care givers. Maybe they'll want to go into the health field

During the past decade, UTEP has become adept at stretching its meager financial resources and strengthening its academic curriculum by forging partnerships with community-based organizations and school districts, as well as other University of Texas System institutions. With no medical school on campus but a community crying out for health services, the College of Nursing and Allied Health has devised creative solutions to persistent challenges.

UTEP offers several new programs in cooperation with the University of Texas Medical Branch (UTMB) in Galveston and UT Houston Health Science Center (UTHHSC).

The UTMB partnership enables students to earn a bachelor's degree in occupational therapy or a master's degree in physical therapy from the Galveston institution while attending required courses at UTEP. A \$1.5 million state appropriation pays for the cooperative venture that was started in response to data showing that 50 to 70 occupational and physical therapy jobs go unfilled in the El Paso area each year.

Another special legislative appropriation gives UTEP students access to a new master of public health program offered by UTHHSC. Dr. George Walker from the UT School of Public Health in Houston came to El Paso last year to direct the public health satellite program. Graduates of the 36-hour program will be well-equipped to address the pressing public health needs of El Paso, a rapidly growing, low-income, bicultural border community that suffers from an inadequate infrastructure and profound lack of access to health services.

Forced to make do with a limited staff of only two-and-a-half, Walker has come up with a high tech answer to staffing and course dilemmas – interactive video. Through video equipment and televisions installed in classrooms at UTEP and UT Houston and the space age wizardry of digitized video and fiber optics, El Paso students can participate in classes being taught in another city hundreds of miles away.

"It's allowed us to do the teaching in Houston until we get more instructors," explains Walker. "Also, we can expand our course offerings more than we would be able to with a limited faculty."

UTEP's recent receipt of a \$5 million biomedical research grant will facilitate research in biology and community health fields. For example, public health graduate students will have access to new biostatistics laboratories and lab equipment that will assist them in compiling and analyzing statistical data about patient populations.

"The biomedical grant, which is enabling UTEP to offer such courses as biostatistics to its MPH students, shows we've got an integrated plan – an interdisciplinary approach to education to stretch meager staff and financial resources," notes Dr. Diana Natalicio, UTEP president.

The university's interdisciplinary teaching philosophy is manifested in a number of community health-related programs. It's not unusual to find social work students working with nursing and allied health students in *colonias* where health needs are being assessed. Donald Blashill, coordinator of the cooperative UTEP/UT Austin social work master's program, notes, for example, that a graduate student from Austin has been working with health students in the Lower Valley to assess transportation needs and the health delivery network.

Interestingly, it was an economics and finance associate professor and a political science professor who, while conducting a socioeconomic study in 1988 with a Ford Foundation grant, alerted UTEP's nursing faculty to the dire health situation in the *colonias*. They found limited access to health care, contaminated water supplies, poverty, poor health practices and a host of other related problems. The duo wrote a proposal that garnered an \$11,000 grant to place two nursing students in Lower Valley schools to assess community health needs, thus laying the foundation for the public health initiatives that are in place today.

When the College of Nursing and Allied Health's Mindy Tinkle came up with the idea to team with Providence Memorial Hospital to offer a series of health seminars for women, she turned to UTEP's marketing department to help her package the concept. The result – The Health College – has been a resounding success, attracting hundreds of women from all walks of life who are seeking practical health information in a supportive atmosphere.

Nursing Program's Influence Felt Throughout West Texas

by Robert McCorkle

UTEP's influence on the quality of health care extends far beyond El Paso's suburbs that sprawl in a crazy-quilt pattern throughout the Rio Grande valley, reaching past the Davis Mountains and into the ranching and petroleum communities that dot the vastness of West Texas.

The university plays a vital role as a resource for primary health care services and comprehensive health education and training throughout the region.

On one hand, the College of Nursing and Allied Health serves as a reliable supply of supplemental health care workers through course practicums and internships that provide undergraduates with concrete work experience. On the other, the graduate nursing program strives to accommodate working health care professionals seeking an advanced degree by offering unconventional class scheduling and other means.

Adventurous nursing students seeking hands-on experience in distant rural communities sign up for Dr. Rena Brands' summer session course, "Health Promotion in Rural Environments." Students receive classroom instruction during the first two weeks of the course, then pack their bags to spend three weeks living and performing public health duties in some of the most sparsely populated counties in Texas. A final week back in the classroom to review the learning experience completes the course.

During the past two summers, a dozen upper division nursing students have worked alongside public health nurses, physicians, dental hygienists and other health care workers in hospitals and clinics in towns like Alpine, Fort Davis, Pecos and Fort Stockton. Through the Texas Department of Health's nursing service program, they have provided a variety of health and nursing services in such areas as family planning, health screening, community health assessments and infant and elderly care.

"This is a program that provides our students with the optimal opportunity to collaborate with residents and various health care practitioners in a rural setting to both educate and learn in a real-life situation," says Brands, who coordinates the program funded by the Texas Tech Health Sciences Center's Education Training Center Alliance of Texas. "At the same time, our students are proving to be a valuable resource in communities struggling with hospital closings and a shortage of medical personnel."

Brands, UTEP's senior community health expert, hopes that UTEP will receive a special legislative appropriation of \$305,500 to continue the program during the 1994-95 biennium. She says state funding is crucial not only because it would allow UTEP to continue offering the rural nursing course, but also because it would allow health professionals in remote areas to access educational resources through satellite systems and interactive computer links, thus enabling them to upgrade their nursing skills while remaining in their community.

UTEP goes a step farther in accommodating West Texans seeking to upgrade their nursing skills or renew state licenses by offering graduate level courses on weekends and during summer months on the El Paso campus.

Dr. Audree Reynolds, director of the graduate nursing program, estimates that about half of the 120 to 135 graduate students enrolled each semester commute from as far away as Midland-Odessa, Roswell and Lubbock. Thanks to flexible scheduling, these students fly four or five times a semester into El Paso on Friday afternoons, attend classes that evening and Saturday, and fly home Saturday evening.

"We are really working with students to find out what their needs are to determine how we can tailor the class schedule to accommodate them and still maintain a quality program," Reynolds explains.

Judy Bartley of Midland is one of a half dozen Permian Basin residents chasing a master of nursing (MSN) degree at UTEP while holding down a full-time job and raising a family. She could have gone to graduate nursing school in Austin or San Antonio, but opted for the El Paso program and is glad she did.

"Most MSN programs offer Monday through Friday classes, so it works out well that UTEP offers a weekend program. It means you can work and still go to school," says Bartley, who is teaching nursing at Midland College while pursuing her master's in adult health.

Reynolds says her faculty works hard to promote networking among classmates and to remain accessible to commuting graduate students. There's even a "How to Survive" handbook for out-of-towners which includes library hours that fit well with flight schedules, as well as locations of El Paso restaurants, motels, day care facilities and even commercial copy centers.

As successful as the concentrated weekends have been, it's UTEP's summer graduate nursing program - one of the few in the nation - that has put the school on the map with health professionals as far away as British Columbia. Reynolds says the variety of MSN candidates who attend the eight-week summer session enriches the educational experience by exposing local students to those with different experiences and perspectives.

UTEP President Diana Natalicio points to the weekend and summer programs as a "manifestation of our commitment to provide an education to non-traditional students who lead complex lives."

A UTEP nursing student gets hands-on experience with infants at the Well Baby Clinic conducted by the staff at the Montana Vista Centro Educativo de Salud.



and come back some day to help their community."

To emphasize to youngsters how lucrative a health care profession can be, Rodriguez, who also conducts the Health Club in Canutillo once a week, says her mom, a nurse, brought one of her paychecks to class to pass it around. Rodriguez says the students were surprised to find out she made \$16 an hour, prompting several to comment they were going to become nurses.

Bob Martinez, a fifth-grade teacher in Montana Vista who helped form a health club, is so enthusiastic about the Kellogg project that he helped organize and now heads a community-based, non-profit organization dedicated to securing more funding to build a permanent health care center in the rapidly growing community. Montana Vista Health Services, Inc. already has acquired a five-acre site across from the middle school and is pursuing several possible funding options to construct a primary care facility.

"When the clinic opened here, it changed the community," Martinez says. "People from this area will not take their kids to the doctor because they don't have the money or the transportation. Even if they did, to take a sick child to Thomason would take all day. I don't think even the schools have as great an impact on the community as the clinic does."

Project director Jesusa Lara agrees that the predominantly Hispanic community was desperate for services before the health center opened its doors.

"There was nothing here but a part-time, volunteer fire department," Lara recalls. "Above and beyond health services, our staff helps coordinate social services for area residents. People are very appreciative that we're here."

Overseeing the operation of the busy clinic, which averages 100 clients a week, is Leonor Nuñez, a nurse practitioner. She sees patients with minor medical needs, referring more severe cases to physicians in town – the closest of whom is about 15 miles away on Yarbrough Drive.

UTEP nursing and allied health students assist Nuñez with patient scheduling, volunteer training, adult health education classes and the coordination of services provided by the county health department, the non-profit Centro Medico del Valle and other agencies. Family planning, immunization, dental services, pre-natal care and adult high-risk clinics are just a few of the services offered.

With the Kellogg grant due to expire at the end of August, teacher Bob Martinez, Nuñez and other community leaders are scrambling to try to find resources to keep access to primary health care available in the remote area.

Dean Castiglia has found one way to help ease the pain while Montana Vista seeks a more lasting solution to its pressing health care needs. Health care services and staffing will be funded through another Kellogg-funded project, the Community Partnership initiative.

The \$6 million El Paso community partnership is one of seven academic, community-based health education projects nationwide chosen to receive Kellogg funds to establish "models" that will change the way health care professionals are educated and health care services are delivered. The El Paso project partners are UTEP, Texas Tech University's Health Sciences Center in El Paso, El Paso County government, El Paso Community College, the school districts of El Paso County and the communities of Fabens, San Elizario and Socorro.

The project has spawned the Institute for Border Community Health Education whose major goal is to develop an infrastructure to support community health efforts.

Institute director Raquel Bauman says the partnership will develop a community-based approach to teaching health professionals, increase accessibility to health services, modify research to reflect community needs, train volunteer community health workers and try to recruit more minorities into health careers.

"We want, through our work, for people who live in the community and the faculties in the various academic institutions to work collaboratively to improve the quality of life of all border residents through good health and education," says Bauman.

As a key component of the overall plan, the border health institute will collaborate with Thomason Hospital to construct a \$1.2 million comprehensive health center and campus in Fabens, a rural, Lower Valley community far removed from most medical facilities. The new health center will house representatives of the border health institute, city-county health department offices, Centro Medico del Valle (a comprehensive care center) and the Head Start program, as well as classrooms, training facilities, examining rooms, and geriatric and primary health care facilities.

Similar to the \$1 million school-centered health project, the larger Kellogg initiative will offer limited health care services, while emphasizing community health education and self-sufficiency. The Kellogg Foundation hopes the multifaceted El Paso projects will serve as models that can be replicated across America to create a more coordinated, cost-effective and comprehensive health care system equally accessible by all people.

UTEP's Castiglia believes that lofty or "ambitious" goals can only be achieved by focusing less on providing services and more on community health awareness and education.

"Our job," asserts Castiglia, "is to educate our young people so they can make changes and to empower the community to become more aware of the important role individuals can play in their own health care. People in the community need to understand that our project is about education and that it will benefit them in many ways in addition to providing improved health care. I think our approach to health care delivery will prove to be cost-effective, will increase access to health care, and produce a model that can be taken elsewhere in the country." ■

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 Aimee Lyon Mayer
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messages

from
 the
 heart

UTEP is proud to be selected as the vehicle through which many individuals choose to pay tribute to those close to their hearts. In 1992, the university received 706 such gifts, for a total of \$125,855.



The donors of these testimonial gifts contributed immensely to our university and its students. We are deeply grateful for their dollars and for the honor of being selected to carry their "messages from the heart."

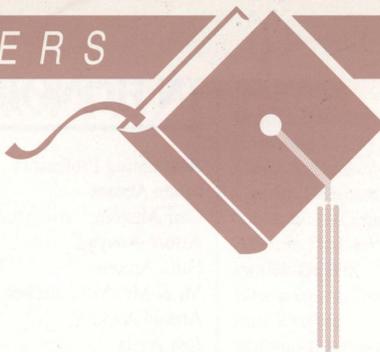
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Southwestern Bell

A Corporation with a Vision

by Stacie Wilson

Since 1979, Southwestern Bell Telephone has been building a bridge to UTEP through its generous annual contributions.

During its 15-year partnership with the university, the phone company has donated close to \$500,000 in cash and in-kind contributions. Programs reaping the rewards of the company's generosity include the Mother-Daughter Program, the Upward Bound Program, various pre-college outreach programs, the library and scholarships.

Each year Southwestern Bell officials meet with UTEP President Diana Natalicio to identify a university need that also meets the company's giving guidelines.

"Southwestern Bell has been a friend to UTEP through several of the company's presidents and general managers," remarks Janis Cavin, UTEP's director of development and alumni affairs. "The company exemplifies corporate citizenship - it is a corporation with a conscience and a vision for the future."



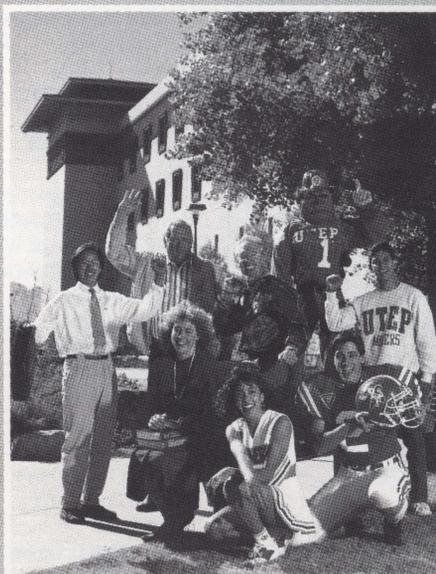
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El Paso

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Clint ■ Fort Bliss ■ Juarez

April 1990-91 Directory

Area Code 915



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In 1990 Southwestern Bell allowed the El Paso branch to customize its area phone directory cover by showcasing a local theme.

"UTEP was celebrating its 75th anniversary, and we wanted to show our support and commitment to the university," explains Martini DeGroat, area manager external relations for

Southwestern Bell. "We decided to feature UTEP on our cover, and it was extremely well-received."

The company accepts the challenge to be an active participant in the educational process and strives to promote quality education through financial assistance and employee volunteerism to educational institutions, DeGroat says. ■



UNIVERSITY IMAGE- MAKER, WRITER, EDITOR, PUBLISHER

by S. Gail Miller

❖ In December 1971, Dr. Arleigh B. Templeton was appointed President of UTEP by the Board of Regents. The university was in the red and the rumble of dissatisfaction across campus was palpable. On more than one occasion, Dr. Templeton said:

"Who the hell knows what's going on around here?"

One of the people the 13th President asked was Dale L. Walker, hired six years previously as director of the News and Publications Office.

"I remember we had lunch at the El Paso Club," says Dr. Templeton. "Dale hemmed and hawed. And I finally said, 'Listen, I'm not going to put up with this hemming and hawing bit. When I ask you a question, I want a straight answer.' I think I was hard on him, I'm that way with everyone I love."

By 1971, Dale Walker had served Presidents Ray, Leech and Smiley.

"He just understood the school," says Dr. Templeton. "He had this way of telling you things and not telling you, at the same time. You had to listen carefully. Then you could understand all the implications of what he was talking about.... He was a tremendous help to me. He'd call me 'boss' and chastise me for not writing down all the stuff I shared with him about my life and work."

He pauses:

"I asked him to write my obituary a couple of years ago and he said he would."

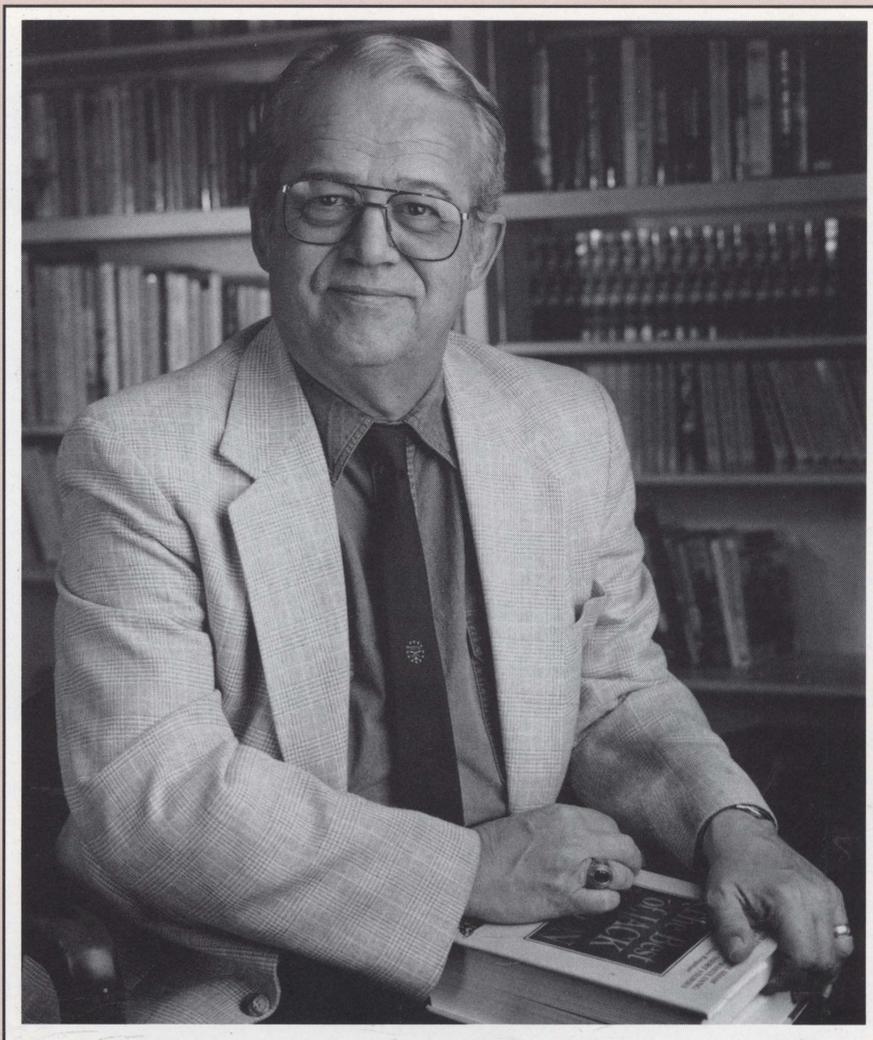


Photo by Franklin Muñoz

Dale L. Walker

❖ Dale L. Walker retired from UTEP on Sept. 1, 1992, after nearly 27 years' service to the institution. He was Director of the News and Publications Office from 1966 until 1989. After many years on the editorial board of Texas Western Press (TWP), he became its director in 1985, holding the two positions simultaneously for four years.

"From the 1960s to the 1980s, Dale created the image of UTEP in the public's mind through his writing and his editorial judgment," says Diana Natalicio. "In those days, it was up to the person who was responsible for News and Publications to get the word out, and at the same time, make important decisions on

handling the media, the controversies and all the University's news."

Veteran newspaper woman Nancy Hamilton, whom Walker hired in 1975, comments:

"Dale was raised in the Middagh school of journalism so he hated the term 'public relations' applied to what he did at the university."

The longtime head of UTEP's journalism department, John J. Middagh, stressed unequivocally that public relations was a dirty profession and that its adherents were little more than shills. According to Hamilton, the media operated differently in those days. Local newspapers relied on editors at El Paso's

(from left to right) Long-time friends and collaborators John West, UTEP Hispanic folklorist and writer, José Cisneros, renown El Paso artist, and Dale Walker chat during a recent photoshoot for Cisneros' upcoming book to be published by Texas Western Press.

non-profit institutions to write features. Walker would call the El Paso Times and say, "How about a story on such-and-such?" He'd write the piece and the paper would run it with his byline. Then, as TV news emerged, film crews could film at 7 p.m. and air stories at 10 p.m. By the 1980s, the media came to view information emanating from these institutions as propaganda—they hired more journalists and gained more control over content and style. The relationship between the university and the press gradually changed.

"This made life even more difficult for the university news person," explains Hamilton, "because university presidents have trouble understanding how little control anyone has over the media in the first place."

Dale Walker served six university presidents in all and became a valuable resource for many other university administrators.

"I certainly couldn't have done my job without Dale's calm presence in a crisis," reflects Wynn Anderson, assistant to several UTEP presidents. "However, I think NOVA was his greatest achievement. Most university magazines have you snoring the instant you flip open the cover."

According to Anderson, Dale Walker brought to UTEP a superb set of writing skills which he put into a fine magazine featuring what people did, from sailing to writing poetry.

"I believe NOVA helped bridge the rift created in 1949 when UTEP changed from the College of Mines to Texas Western College," Anderson explains. "For years, many graduates believed the college had drifted from its original intent because we'd added liberal arts."

President Joseph M. Ray's instructions upon NOVA's founding were to "start a campus news magazine that we may all take pride in one day." Walker became its editor beginning with its fourth issue



Photo by David Flores

and continued as editor for 25 years—through the magazine's 100th issue.

"My theory was that we should publish a magazine with good stories about UTEP's talented and fascinating people—features about what they did to make the university great," explains Walker. He adds:

"I didn't view NOVA as a fund-raising publication, a connotation I despised then, and still do. That emphasis makes university magazines unendurable and is the reason most of them are not fit to line a bird cage."

❖ Born in Decatur, Ill. in 1935, Dale Walker and his sister Joy were raised separately after their parents divorced.

"Dale was an average student," says Joy Elliott from her home in Decatur. "He wasn't much into athletics or club-joining, but he was heavy into comic books."

Joy recalls that their grandparents' home had a glass-fronted, sectional bookcase which contained both Abraham Lincoln's speeches and Charles Warren Stoddard's public lectures—sold door-to-door in those days—in addition to several novels by Jack London whose life and writing was to become one of her brother's inspirations.

"His grandparents would be very proud of what's in that antique bookcase now," says Joy. "All 15 of his books."

Walker joined the Navy in 1958 and afterwards moved to El Paso because his father lived here.

"When I met him," says his wife of 33 years, Alice McCord Walker, a native El Pasoan, "he was a journalism student on the G.I. Bill and had a part-time job at the Federal Reserve Bank where I worked."

She smiles: "It took him six months to get me to have a cup of coffee with him—I was very proper and my parents were very strict." They were married on September 30, 1960, at Alice's family church.

"Our son Michael had just been born when Dale started working at UTEP. He was a stringer for *Newsweek*, was writing news full-time for KTSM and freelance writing at home."

In 1966, Walker was hired away from KTSM to head UTEP's News and Publications office. Reminiscing about his years at UTEP, Walker says:

"The institution and its presidents, from Joe Ray to Diana Natalicio, have all been good to me. I was paid well, treated well, and given latitude to do my work, particularly by Monroe and Templeton—

I love them both. Diana Natalicio, as well, is special to me, although our association has been almost exclusively centered around Texas Western Press. I won't stand behind anybody in my admiration and affection for Diana and this is not only because she always picks up the tab when we have a waffle breakfast at Village Inn. She is an amazing person—a funny, talented, brilliant lady with a mind teeming with ideas, impressions and ambitions.”

The year Walker joined UTEP, his first book was published. Thirty years later, his publication record is impressive. Walker rarely talks about his own work and more often than not, tries to talk writers out of writing about him. Recently, however, his extensive knowledge of Western literature has received some well-deserved attention—he was liberally quoted in a January, 1993 article titled 'Blazing a New Trail' in the national magazine, *Publisher's Weekly*, concerning trends in Western books.

Walker's works include hundreds of articles in 130 periodicals, from *Newsweek* to Ellery Queen's *Mystery Magazine*, from the old *Argosy* and *Cavalier* magazines to *Modern Fiction Studies*, *American Literary Realism* and *Western American Literature*, from *Soldier of Fortune* to *Writer's Digest*, from the *Baker Street Journal* to *Stars and Stripes*. Walker's fifteen books have been reviewed in the *New York Times*, *Washington Post*, *Saturday Review*, *New Republic*, *New Yorker*, *The Nation*, *Atlantic*, and *Los Angeles Times*. High-caliber writers such as Tony Hillerman, Elmore Leonard and John Jakes have praised his on-going column, "Westerns," in the *Rocky Mountain News*.

In a recent Walker monogram, Montana novelist Richard S. Wheeler wrote:

He looks like a book man, peering at you with a penetrating gaze from behind trifocal glasses, the laugh and frown lines etched deep in his fifty-six-year-old face, his hair shot with gray, his shirt usually dark, his feet encased in old western boots, his trousers suspended by the galluses—the sartorial engineering required by an expanding waist.

❖ Above all, Dale Walker is a book man. Fascinated by a love of the written word from an early age, Walker was inspired by books, particularly those of Jack London. He says:

"When I was in the Navy, stationed at Kodiak, Alaska, I strung my leave passes together and retraced as many of London's footsteps as I could. I got to Dyea Beach and Skagway, saw the Chilkoot Pass from a tramway. Jack walked up it with a 100-pound pack. I saw Lake Lebarge, and White Horse but never got as far north as Dawson, although I did get to Yellow Knife and the Great Slave Lake."

Walker writes biographies about people who died young. Jack London, Januarius MacGahan, John Reed and Buckey O'Neill all died before they reached 40.

"Virtually nothing interests me that has occurred since 1918 or before 1790," says Walker. A voracious reader, Walker's talent comprises, at a minimum, an untutored knack for speed-reading combined with an inordinately retentive memory, a knack for interviewing and a love of the English language.

"The best interview I ever had was with Jack London's eldest daughter, Joan, in Seattle, in 1966," he says. "She drank whiskey and milk while we talked about her father and other American radicals—from John Reed to Harry Bridges—whom she knew."

Pressed to enumerate what he's proudest of, he lists his children—Eric, Chris, Mike, John, and Diane.

"All of whom," he says with a smile, "turned out great without much help from me but with a lot from their mother."

Of his work, he says: "Writing professionally is a merciless life. The rewards are scanty and the toll is great. I wouldn't have it any other way."

He pauses: "Well, yes I would: the rewards could be less scanty."

Of the 15 books Walker has written, his favorite is Januarius MacGahan. Stumbling across a reference to

MacGahan (an American war correspondent who died in Constantinople in 1878) in a collection of great journalists' writing, Walker later saw a photo of MacGahan's grave marker.

"I visited the grave in New Lexington, Ohio. It has MacGahan's name on one side and the words 'Liberator of Bulgaria' on the other," explains Walker. Those three words made Walker curious. What was this Ohio boy doing in the Balkans? Walker's research unearthed neither a book about MacGahan nor a mention of him in the history of journalism.

No longer. *Januarius MacGahan: The Life and Campaigns of an American War Correspondent* found a home at Ohio University Press in 1988. It received glowing reviews from *The Smithsonian*, *Washington Times*, *Journalism History*, *Journalism Quarterly*, *Journal of American History*, *New Letters*, and a dozen newspapers.

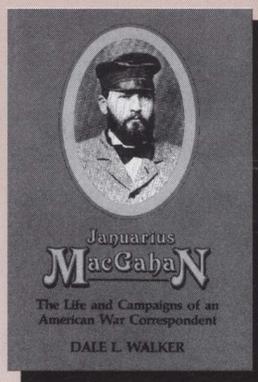
His voice drops a couple of octaves and he says: "Everything about that book was hard. Hard to research, hard to write, hard to find a publisher."

Today, Walker continues his work at Texas Western Press part-time, writes for various magazines and is working on a major book project out of his home. In 1992 he became president of the national organization, Western Writers of America.

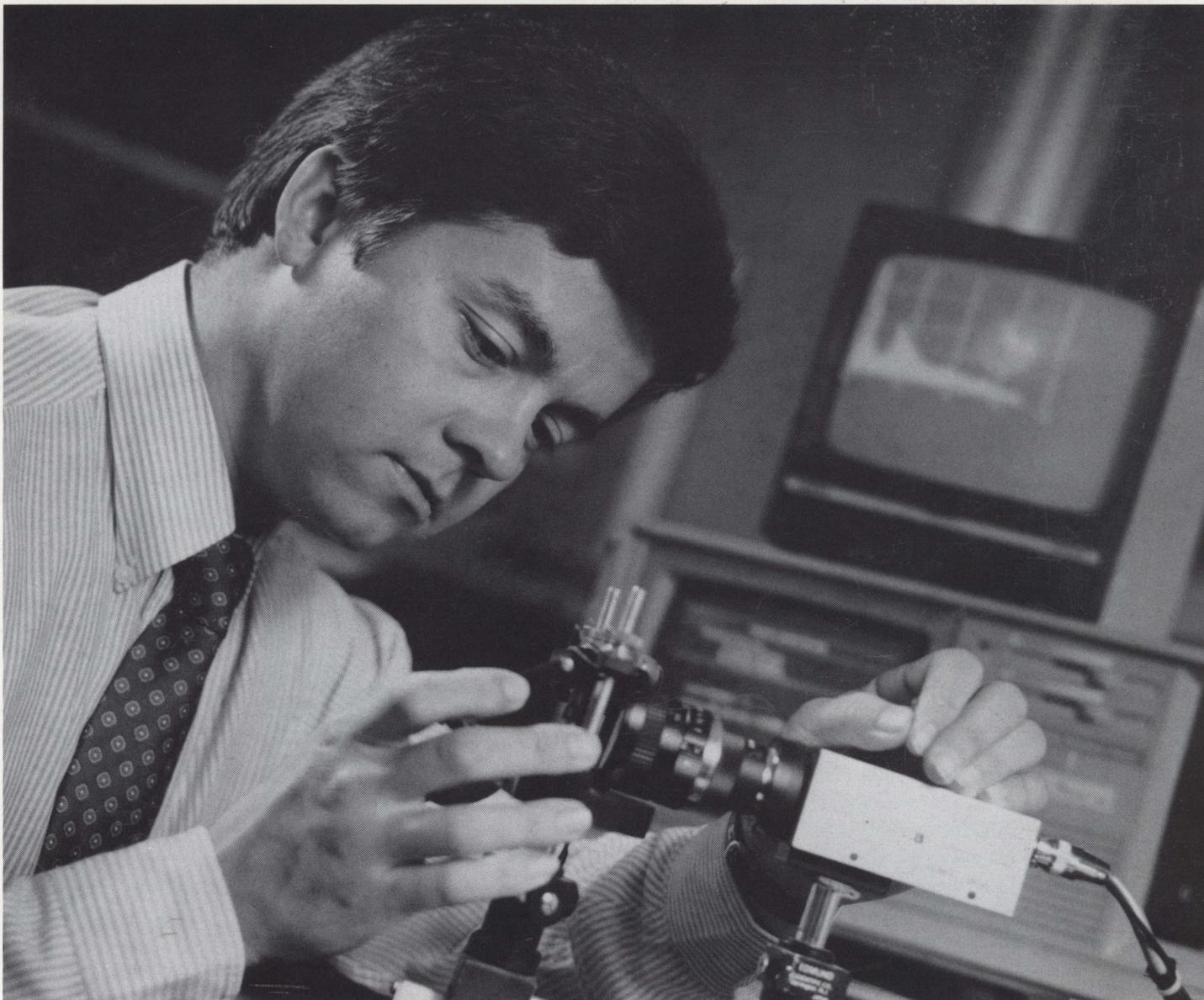
His wife, Alice, an attractive, dark-haired, thoughtful woman, acknowledges it is not easy living with a writer, but she says, "When I tap on his study door and tell him he has to come out, he usually does." Seated in the large, book-filled room of their Westside El Paso home, she talks about Walker's numerous books and magazines articles, adding:

"His best work?

He hasn't written it yet." ■



S. Gail Miller is a former NOVA assistant editor and freelance writer.



Manufacturing engineer Jose Luis Urias conducts quality control research at a Honeywell factory in Ciudad Juarez with machine vision equipment he learned to use as a UTEP master's student. Urias' research at the factory, where he now works full time, is an example of UTEP's efforts to promote economic development by transferring money-saving technology from the laboratory to the work place.

Hundreds of young women in red smocks peer through microscopes to manipulate tiny robotic arms or lean across steel tables covered in white paper, sorting, pinching and pressing plastic casings around diminutive electronic switches at Honeywell International's Micro Switch factory in Ciudad Juarez, Mexico.

In a cramped corner of an office just off the assembly floor, UTEP engineering graduate Jose Luis Urias fiddles with a red fleck of plastic – an infrared-sensitive light-emitting diode used in the switches – and a comparatively huge chunk of desktop computer hardware he's using to figure out how to improve the flow of light through the diode's pin-head-sized lens.

Urias' corner of the generic, blue-carpeted, modular-designed office doesn't look like a place where one is likely to generate ground-breaking scientific data that could reform an assembly process.

But that's just what Urias has rather deliberately stumbled across in two years of research on a UTEP-supported master's thesis about using machine vision technology to control the quality of the diodes.

Urias was hired as an engineer at the Honeywell factory across the border from El Paso in April 1991, about 16 months before receiving his master of science degree in manufacturing engineering. He's working with company engineers and UTEP professors to re-

Taking Care of Business

UTEP Drives Industrial Development

by Denise Bezick

duce the number of ineffective switches that come off factory assembly lines.

The light-sensitive switches are used to count money in bank machines, to detect paper flowing through copy machines and to sense the presence of a disk in a computer disk drive.

"It is very exciting," says Urias, who has a rare opportunity to work on research and development at the same time he's doing entry-level engineering tasks. "Every time we do an experiment it is like doing detective work. When I first started doing research on this (project) it was very interesting because nobody else is doing this. Nobody."

The machine vision experiment – one of more than a dozen UTEP has carried out through its Engineering Consortium – is an example of UTEP's efforts to transfer technology from its laboratories to local factories, improving production and making business more profitable.

UTEP president Diana Natalicio has made technology transfer a top priority as the university strives to become a vital player in the economic and social development of West Texas, Northern Mexico and Southern New Mexico – in a region known as Paso del Norte.

"Our laboratories and our people are valuable resources to this region," Natalicio says. "Our challenge is first to ensure that the community knows that we have these resources and, second, to make sure these resources are easily accessible. We have many pieces of equipment that are unique to this region. If there is a way that equipment can be used to help someone in local industry, that is what it should be used for."

■ Hands-on learning reaches students – and businesses

With that mission in mind, UTEP depends on the technology transfer process as an important tool in educating students and improving their job prospects.

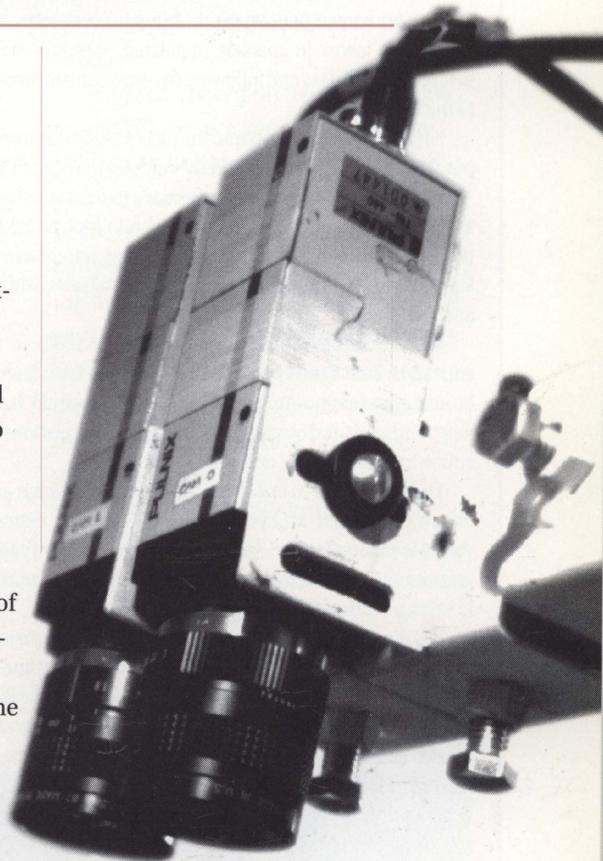
UTEP engineering professor Carroll Johnson says, "The machine vision lab is probably the best example you will find of something like that. We've put more systems in factories than just about any university around."

A machine vision system is a piece of computer-driven hardware that is programmed to "see." Machine vision systems are used in industry to examine things humans can't see, such as the miniature, infrared-emitting chips, and to do quality-control inspections, a repetitive task at which research has shown that humans rarely excel.

The technology was developed for the space program more than 30 years ago, but private industry has only recently begun to learn to use it. Machine vision hardware is expensive, and most factory engineers have neither the know-how nor the time to design software to meet a factory's needs. Nor do they have contact with an academic who can do it for them.

Johnson, a machine vision expert who spent 12 years working as an engineer before returning to college for a master's degree and eventually a Ph.D., is trying to lasso the wild idea, bridle it, break it and get border factories interested in trying it out.

"They won't come to you," Johnson says. "You have to go to them. The new technology represents an investment to



them, and we have to convince them that it will work."

UTEP's machine vision lab contains expensive hardware that Johnson teaches students to use by finding companies that want to try machine vision and telling the students to design software to make the machine do what the company wants.

Master's students like Jose Luis Urias and his partner, Juan Garcia (M.S. in industrial engineering, 1991), spend hours experimenting in the laboratory, hoping to emerge with proof that machine vision will work in a local factory and a thesis paper on how they developed the system.

In the case of Urias's light-emitting diode inspection tool, Garcia wrote a program telling the computer to identify

Crunching Numbers: Borderbase Deals in Business Facts

by Denise Bezick

The U.S.-Mexico border runs east from the Pacific Ocean through the immense sun-beaten Sonoran and Chihuahuan deserts, slicing through tiny windblown towns in sparsely populated, mesquite-dotted rural counties before hitting El Paso and following the great canyon forged by the Rio Grande to the Gulf of Mexico.

For decades, the people and the places along that dusty international line put the grit in old westerns and the intrigue in regional folk legends.

But as trade between the continent's two great nations picked up in the 1970s and 1980s and big business began to look at the U.S.-Mexico border region as a network of roads, factories and warehouses, those demanding knowledge about the region were no longer satisfied with Hollywood intrigue and folklore.

UTEP developed Borderbase in the late 1980s to tell manufacturers, educators, land developers and legislators the hard facts about U.S.-Mexico border communities and to tell them what would happen to the desert neighborhoods and bustling border cities as the relationship between the two countries matured and trade increased.

The computerized border statistics library, which is packed with hard-to-obtain data about Mexico and tiny U.S. border counties, has become a valuable economic development tool for local industry and an integral part of grass roots initiatives to attract federal funding and improve the quality of life in service-starved border regions.

It is the only on-line information center that can, in just a few keystrokes, tell you the combined population of the counties that line the U.S. border with Mexico (5.7 million), compare the gross product of the Paso del Norte region by industry (retail trade in El Paso County, Ciudad Juarez and Southern New Mexico accounted for \$6.1 million in 1991, or 39.2 percent of the total), give you the names, addresses and home offices of maquiladoras that use various U.S.-made products in their assembly processes, and spit out reliable information about rapidly changing social and economic conditions on the Mexican side of the border.

"Lawyers who have clients who want to sell products in Mexico use it to help their clients decide if there's a market for what they're selling," says Sergio Barrio, an assistant director at UTEP's Institute for Manufacturing and Materials Management (IM³) who is in charge of Borderbase. "We supply statistics to the Texas Department of Transportation and the Texas Department of Commerce, and we are the census affiliate for the Rio Grande Council of Governments."

Borderbase is a giant collection of numbers culled from hundreds of U.S. and Mexican government documents, state government archives, dozens of county and municipal tax offices, school districts and other government and private sources. Much of the information can be accessed through an on-line subscription or through individual reports prepared by IM³ staff.

The Texas Legislature, which in 1989 funded UTEP as one of three Texas Centers for Border Economic and Enterprise Development, charged the university with compiling data about the region's business climate and people.

For maquiladora industry suppliers, Borderbase is an invaluable one-stop reference that lists potential buyers in Mexico as well as information about real estate and job markets north of the border, says Phil Meldahl, vice president and general manager of Outboard Marine de Mexico, a company that manufactures boat engines in Juarez, across the border from El Paso.

For community groups weighing the need for new social programs, it is a readily available source of information, says Justin Ormsby, executive director of the Rio Grande Council of Governments.

Meldahl says Outboard Marine used a report generated through



Borderbase's chief numbers cruncher, Sergio Barrio, discusses the socioeconomic database with data entry supervisor Rebecca Bailey.

Borderbase a few years ago when trying to encourage one of its parts suppliers to open a warehouse in El Paso. The report showed that other Juarez factories use the plastic injected molding components the supplier makes – an indication that the company might expand its market by moving to El Paso.

The move meant increased efficiency, and therefore increased profitability, at the Juarez factory, Meldahl says. Outboard Marine, like many border manufacturing plants, operates a "just-in-time" assembly line. That means that the company stores very few unassembled parts at the Juarez plant, relying on suppliers to deliver small quantities of components just in time to feed them into the assembly line. When parts don't arrive, production stops.

The closer and more accessible the parts are to the Juarez factory, the more cost efficient the assembly process, Meldahl says.

The Border Trade Alliance relied on Borderbase statistics last year when it presented its border legislative agenda to Congress, recalls Veronica Callaghan, a director of the alliance's local affiliate and an El Paso real estate developer.

The result: Congress appropriated more than \$100 million for infrastructure improvements on the U.S.-Mexico border, including nearly \$30 million for El Paso roads and environmental protection and hazardous waste containment facilities at the Bridge of the Americas and the Zaragoza Bridge.

"It is difficult to get reliable information about business trends along the border," Callaghan says. "But the people who run IM³ really understand what is happening in industry."

Jose Luis Sanchez, a spokesman for U.S. Rep. Ron Coleman, D-El Paso, agrees. Because of IM³'s extensive contacts in private and public sectors in Mexico, it would be difficult to match the quality and the quantity of information that UTEP provides about the border region, Sanchez says.

Coleman, who is chairman of the Congressional Border Caucus, relies on UTEP statistics to inform the rest of Congress about the social and economic realities on the U.S.-Mexico border.

The border region, Sanchez says, competes with other service-starved regions of the country for limited federal resources. Borderbase statistics have helped Congress prioritize border infrastructure and health needs and justify funding for important projects, he says.

But it isn't only Borderbase's number crunching that makes it a valuable resource in the community, says Ormsby of the council of governments.

"The biggest resource that the university has is its people," Ormsby said. "You can find data and rooms for meetings but you can't compensate for good, quality people who have a service attitude and who want to help the community."

the center of a diode's optical lens and to figure out how far the electronic chip that creates the light is from that center, and Urias developed a research plan that uses the computer to analyze differences between diodes that emit the proper amount of light and rejected parts that don't.

Now, Urias, who grew up on the border, is sharing his education with future Juarez engineers by using examples from his research to teach a class in applied statistics to engineering students at the Juarez branch of the Monterrey Institute of Technology.

Urias' boss at Honeywell, manufacturing engineer manager George Sarmiento, says Urias' work is helping the company understand design problems that have crept into the diode manufacturing process during more than 20 years. The research eventually will reduce the number of faulty diodes the factory produces and make the process more cost efficient.

"Some of the design has been lost through the years," Sarmiento says. "There were a lot of assumptions being made about what was important and what wasn't important in the manufacturing process. With this machine we can actually go back and figure out the physics of the design. We can figure out how much deviation we can stand and still get a workable unit. Then we can correct our tools and molds to produce the best product."

Another machine vision system UTEP developed a few years ago for Honeywell's keyboard assembly factory in Juarez significantly reduced the number of faulty keyboards coming off the assembly line there, engineer James Bowery says.

Mechanical and industrial engineering professor Dr. Carroll Johnson measures the position of integrated circuits with electrical engineering graduate student Jerry Chaparro in UTEP's machine vision laboratory. UTEP has developed more than a dozen machine vision tools for Honeywell, Motorola and other companies that operate factories on the U.S.-Mexico border.

"I don't think we would have been able to do this without UTEP," Sarmiento says. "It took a combination of the machine vision system and an individual like (Urias) who could put it to use and who knew his way around UTEP and could get help there."

■ Learning to use UTEP

Dozens of other companies look to UTEP for help in projects ranging from testing of equipment and components to recommending significant improvements in their operations. On the list are major corporations and small businesses ranging from Ford, Motorola, Dale Electronics, Johnson & Johnson, and Diesel Recon in El Paso and Juarez to Ultra Carbone of America in Detroit and Norwood Insurance of Midland, Texas.

Still, industry has only begun to make use of the wealth of equipment and know-how UTEP has to offer, says assistant professor Larry Roderick.

Roderick, a mechanical and industrial engineering instructor who is

president of the El Paso chapter of the Institute of Industrial Engineers, is organizing a border manufacturing conference that will bring hundreds of engineers who work in the region's factories to UTEP in May to learn how the university can support them in their work.

Many of the region's more than 300 maquiladoras are geographically isolated from home offices in Pittsburgh, Chicago and Dallas, and their engineers desperately need research and technical support for simple tests, trouble-shooting and engineering solutions, Roderick says. But they don't use the university's resources because the maquiladora industry generally transfers engineers from domestic offices to border factories, and many of the engineers have never been to the UTEP campus, Roderick says.

"They don't understand that there is expertise here that is very willing and able to help them in their areas of research and application," Roderick says.

In the case of Honeywell, the Juarez

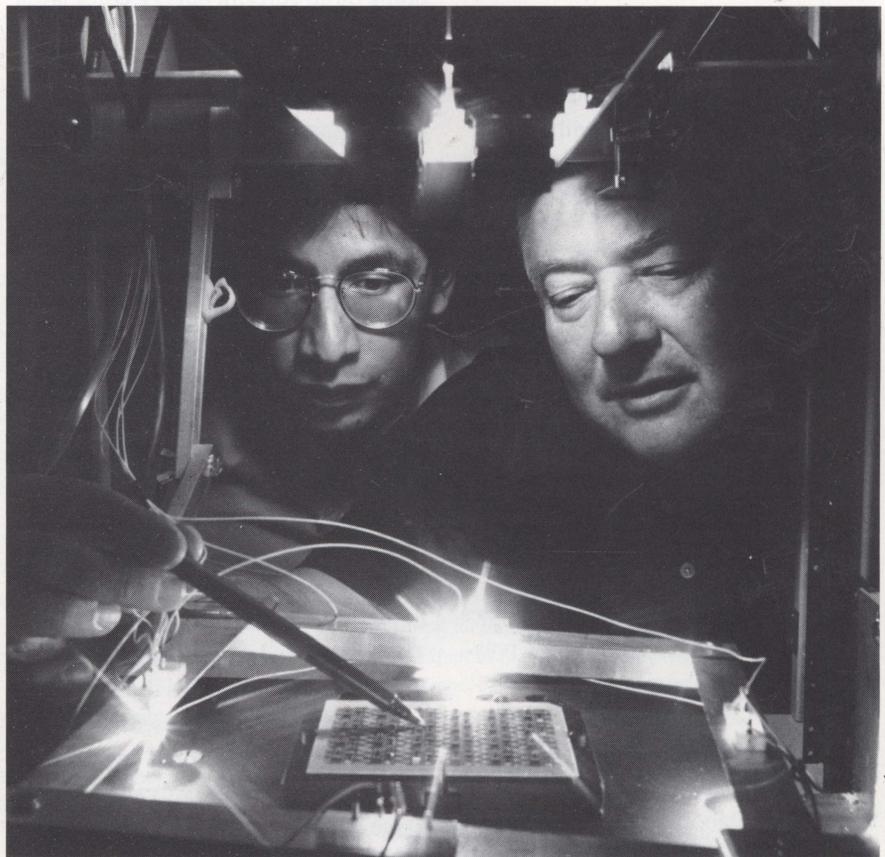


Photo by David Flores

micro switch factory is more than 600 miles from main offices near Dallas but only a few miles from UTEP.

"When you are so far away you tend to believe that the problems you have originate at the factory level," Sarmiento says. Proving that isn't the case is difficult without sophisticated technical support such as that available at UTEP.

In addition to developing machine vision tools, UTEP students use computers to simulate manufacturing processes and predict how changing the process will effect productivity and quality.

Materials scientists analyze engine components to determine why they don't work correctly.

UTEP's electron microprobe – the only machine of its kind in the region – can determine whether a material has absorbed atmospheric pollutants.

Geophysical equipment in the geology department is the most sophisticated in the region for analyzing underground features and determining the depth of the water table – tests that must be done before drilling a well or building on a plot of land.

And consultants at UTEP's Institute for Manufacturing and Materials Management (IM³) are working with Sandia National Laboratories to connect industry with technologies that have been developed there.

Sandia National Laboratories in Albuquerque is a federally-funded research institution that has worked on national security programs in defense and energy since its inception in 1945. Many of the laboratory's developments were used in the space and weapons industries, but they never were transferred to private industry to stimulate economic development.

The end of the Cold War and changes in national security needs forced a reassessment of the laboratory's mission, and in 1989 Congress adopted the National Competitiveness Technology Transfer Act, making technology transfer one of the laboratory's goals.

Under the laboratory's Technology Maturation Program, UTEP works with a Sandia liaison officer to identify Sandia technologies that have potential commercial value.

An example: IM³ director Dr. Donald Michie says Sandia has developed a substitute for Freon, an environmentally harmful liquid used in refrigeration and air conditioning, but industry hasn't yet begun to use it in transformers. UTEP is trying to identify border maquiladoras that could use the coolant and hook them up with suppliers.

■ Research with a community vision

Taking one step back from technology transfer to technology development, UTEP recently won approval from the Texas Higher Education Coordinating Board to offer a doctoral degree in materials science and engineering.

Doctoral candidates will conduct research that will have a wide variety of industrial applications, from improving tools used to weld aluminum to developing more efficient energy-conserving solar panels.

Natalicio calls the approval the final step in positioning UTEP as a premier science and engineering institution. It means that 10 years from now, UTEP will not only be transferring technology developed at places like Sandia to local industry, it will be transferring technology developed here for local industry.

"This university, and any other sensible university, needs to be proactive," says Dr. Larry Murr, who will direct the Materials Research Institute, through which the doctoral program will be managed. "We need to help develop this region's economy, but we've got to use what is already here. We have industry here, and manufacturing jobs pay. Those jobs can be taxed and that creates a tax base and stimulates the economy."

"We can do esoteric research," adds Manny Pacillas, director of engineering programs. "But where we can really carve out a niche for ourselves is in the

manufacturing areas where we can translate the esoteric to the tangible."

■ The power of people

Despite the long list of UTEP's industry-oriented research and student development programs, technology transfer doesn't end there.

Informal relationships through which university faculty and El Paso area professionals address needs in various fields probably account for the vast majority of information that is exchanged between the university and the community, according to President Natalicio.

"Technology transfer occurs mostly through people sharing with other people what they know," Natalicio said. "It may be just an informal sharing of knowledge."

Civil engineering professor Anthony Tarquin has used \$193,000 in grants from the Texas Water Commission to design self-contained, on-site wastewater treatment systems for five homes in El Paso's service-starved Lower Valley. He wants to design a simple, inexpensive system that he can teach septic tank installers to build and a system which homeowners in the economically deprived region can install themselves for less than \$1,000.

Retired political science professor Melvin Straus used his knowledge of how government works to help write the El Paso City Charter in the mid 1980s.

Psychology professor Guido Barrientos is teaching Ysleta Independent School District teachers to manage children with behavior problems.

And the list goes on.

The end result of all of this, Pacillas says, is that the region will see concrete examples of UTEP expertise and realize that UTEP graduates understand the unique problems and challenges of the region and have a solid educational background that will help them tackle those challenges.

It worked for Jose Luis Urias and, through him, it is working for Honeywell. ■

Family Turns to Business Forum for Help with Thriving Enterprise

by Denise Bezick

Fifty-two-year-old Cesar Viramontes leaned forward in his chair and watched from a picture window in a second-floor conference room at International Garment Processors as a sea of workers on the slick, modern factory floor below sorted, inspected and boxed piles of stone-washed denim pants and skirts.

The leader of El Paso's garment processing industry had slipped away from the table where his three young executive daughters – heirs to the multimillion dollar laundry Viramontes built as his children were growing up – talked animatedly about their roles in a family business that has been as much a part of their lives as of their dad's.

"We know the jobs out there because we have experienced so much from the bottom up," says Wendy Viramontes, a former Miss El Paso who, at 31, is the oldest of Viramontes' eight children. "My dad started the business with a coin-operated laundry in Canutillo when I was about 11 or 12, and I used to work there after school giving out change and cleaning between doing homework. We all did."

Now, as the laundry's sales top \$20 million annually, the women who learned the business of laundry as teenagers are by necessity learning the business of business as mid- and low-level executives in the family factory.

And they are turning to UTEP experts for help.

Their father – a self-made man who never finished high school – is obviously very much in charge of what happens on the factory floor, but the women feel the future of his vast accomplishments resting ever more heavily on their shoulders. Wendy and sisters Cynthia and Heidi crave knowledge, and they convinced their dad to enroll in the College of Business Administration's Family Business Forum, where they hope to find peer support and guidance.

The program, which enrolled its first class in February, will draw together Paso del Norte region residents whose families own businesses with annual sales of more than \$1 million for business- and family-related seminars and discussions.

Encouraged by the college's dean, Frank Hoy, a nationally recognized small business development leader who came to UTEP from Georgia State University in 1991, UTEP developed the forum to help owners of local family businesses keep their enterprises healthy. Through quarterly meetings and a series of newsletters, experts from UTEP and elsewhere will address critical issues of unique importance to family-run firms. Topics include deciding when and if children and siblings should participate in running the business, inheritance and the transfer of power to younger generations, said Carmen Ghiselli, an assistant to the dean who coordinates the program.

"Ninety-two percent of the businesses in El Paso are family-owned businesses, but 86 percent of family businesses in the United States don't survive to the third generation of ownership," says Ghiselli, whose own family started a hotel chain in South Africa when she was young. "We can't allow this family business system to die. It is the backbone of the free enterprise system in America."

Cynthia Viramontes, a 27-year-old UTEP business major who works full time in her father's human resources department and calls herself the peacemaker of the family, wants to know how other families resolve business-related arguments without jeopardizing family relationships.

And she wants to know how to keep normal father-daughter struggles from affecting business relationships.

Working together sometimes puts a strain on family life, Cesar Viramontes agreed, drawn back into his daughters' conversation.

"We always relate work to what is happening in our family," Viramontes admits. "If I think my daughters' lifestyles aren't what they should be, I say it's because they've had it too easy at work."



Photo by Joel Salcedo

Cesar Viramontes and his three oldest daughters (from left), Heidi, Wendy and Cynthia, turned to UTEP's Family Business Forum for peer support and advice in running their family's enterprise – International Garment Processors. The company is among the nation's top 500 Hispanic-owned businesses, according to Hispanic Business magazine.

"It is a lot of stress," Wendy says. "We not only have to worry about keeping the business going to employ all of these people who need their jobs to support their families, but we have to also think about ourselves and our children and keep the business going for them. We aren't employees who can just quit and walk away."

The business, formerly known as Economy Laundry, employs about 700 people who work three shifts in two processing plants. It has been listed among *Hispanic Business* magazine's top 500 Hispanic-owned businesses every year since 1988.

"It has gotten so complex that my dad doesn't have all of the answers anymore," Cynthia says. "Sometimes it is hard to realize that your dad doesn't know everything."

But dad chimes in, adding a fatherly wink to the conversation: "They all just think they know best, but I know that I know best."

In addition to the Family Business Forum, UTEP reaches out to locally owned business with trade-related classes and planning advice, says Henry King, associate director of UTEP's Center for Entrepreneurial Development, Advancement, Research and Development (CEDARS).

King says lack of managerial expertise and undercapitalization are the two major problems facing El Paso businesses.

CEDARS tries to help businesses overcome those problems by working with managers to develop business and marketing plans and solve administrative dilemmas and by offering professional education classes on a wide variety of subjects, including meeting Environmental Protection Agency and work place safety standards.

In the long term, King says, the university hopes to create a lending institution that would use grants, donations and funds from local banks to offer loans to small business that can't qualify for loans from local banks.

Businesses that apply for the loans would have to prove that they need the money and have the expertise to handle it, King says.

If they couldn't, he says, CEDARS might refer the owners to education or assistance programs before granting the loan.

Both CEDARS and the Family Business Forum were developed as alternative education projects that provide El Paso's entrepreneurs with the expertise and education they need to succeed.

Viramontes' daughters, whose careers are growing with their father's business, say this is exactly the kind of help they are looking for.

ALUM NOTES

▼ 50's

Sam Donaldson (B.A. '55) ABC-TV News Correspondent and host of ABC's "Primetime Live," has been named "Man of the Year" by the Kappa Sigma Fraternity, at a banquet given in his honor in Arlington, Virginia. Donaldson was UTEP's Outstanding Ex in 1976.

Elizabeth Rouse Sipes (B.B.A. '55; M.A. '68) has been serving on the executive committee of the UTEP Heritage Commission and Matrix Society since retiring from teaching in the College of Business Administration in 1989.

▼ 60's

Carlos Cobos (B.A. '62) is a Southern Baptist Minister working on the Sunday School Board of the Southern Baptist Convention in Nashville, Tennessee. He is the Association/Leadership Specialist in the Discipleship and Family Leadership Department.

Fred "Lico" Reyes (attended '62 - '68) a multi-talented actor, disc jockey and master of ceremonies, was named to "Who's Who Among Hispanic Americans" for 1992. He operates The Portable Party in Arlington, Texas and has been credited as a pioneer in that business. Honors in recognition of his dedication to the youth in his area include the 1991 "Oscar" from Marian Anderson Cultural Society for being a positive role model for 25 years.

Bert Almon (B.A. '65) has been named a Hawthornden Fellow in Literature for 1993 and will hold a residency at the International Writers' Center, Hawthornden Castle, Scotland.

David L. Gardea, Jr., CAPT./USNR (Ret.) (B.B.A. '65; M. Ed. '84) is Chief, Operations Branch, Directorate of Training Development, U.S. Army Air Defense Artillery School, Ft. Bliss. He was awarded the Achievement Medal for Civilian Service.

Rene Nuñez (B.A. '67) has been appointed to the Southern Regional Education Board by Texas Governor Ann Richards.

D. Edward Martin, CPA (B.B.A. '68), is a partner with Richard A. Eisener & Company, one of the largest CPA firms in metropolitan New York. He is an adjunct professor of accounting at New York University, Pace University and the City University of New York. Martin is co-author of the book, *Attorney's Handbook of Accounting, Auditing and Financial Reporting*.

Richard A. Eason CAPT./USN (B.S. '69) recently returned from a six month tour to the western Pacific and Persian Gulf aboard the USS San Jose. He and other crew members painted and repaired the Al Aseef School for the Handicapped in Dubai, United Arab Emirates, and the Rumah Amal Cheshire Home for the Handicapped in Penang, Malaysia. Eason earned a master of science degree in 1978 at the U.S. Naval Postgraduate School, Monterey, California.

Luis Ybañez (B.S. '56; M.S. '69) Director, Division of Bridges and Structures, Texas Department of Transportation, has spent his career building state-of-the-art bridges which have received national acclaim. As a representative of federal, state and local agencies, he served as liaison between the U.S. and Mexico while working on bridges spanning the Rio Grande in El Paso and Presidio, Texas.

▼ 70's

Ruben R. Armendariz (B.B.A. '72) has been appointed a resident officer of the National Labor Relations Board's San Antonio Resident Office. A career NLRB Field Examiner, Armendariz has served as an expert field examiner in the San Antonio office for the past 12 years. He received his M.B.A. degree from St. Mary's University, San Antonio in 1985.

Lillian Crouch (M. Ed. '72) was honored recently at the Martin Luther King Public Service Awards Banquet

at UTEP. She was recognized for her contributions to public education and for being the first African-American member of the Woman's Club of El Paso.

Joyce L. Harris, Ph.D. (B.A. '73; M.A. '74), joined the faculty at Memphis State University in the Department of Audiology and Speech Pathology. Harris teaches courses in multicultural aspects of communication development/disorders and adult neurogenic disorders.

Cynthia D. Corman (B.A. '75) earned a B.A. in archeology (1985) and a master's in physical anthropology (1987). She is a senior analyst with JIL Systems in Washington D.C. During the past year, she has served as Commanding Officer of the Naval Reserve Personnel Mobilization Team in Dallas, Texas. She was recently awarded the Navy Commendation Medal for superior professional service.

Luis Herrera (B.S. '75) holds a master's degree in Library Science from the University of Arizona and a master's in Public Administration from California State University, Long Beach. He is deputy director of the San Diego Public Library, and was recently elected president of the California Library Association.

Anna M. Salguero (B.S. '75) is the Network Engineering Department area manager for Southwestern Bell in St. Louis, Missouri. She is also the national president of the Society of Women Engineers. Salguero was a recipient of the Mathematics Association of America Award and has been listed in Who's Who in Texas and Who's Who in the Midwest.

Matthew A. Sanderford, Jr. (B.S.E.E. '75) is president of Marsand, Inc., a broadcast/communications technical consulting company in Fort Worth which builds turn-key radio and T.V. stations and production facilities.

J. James Rohack M.D., F.A.C.C. (B.A. '76) senior staff cardiologist at Scott and White Clinic, College Station, Texas and assistant professor of medicine at Texas A. & M., will be honored in Washington D.C. in April, 1993, for his election into the Fellowship of the American College of Physicians. Dr. Rohack earned his medical degree with honors from the University of Texas Medical Branch in Galveston.

Patricia T. Ayala (B.A. '78) has been appointed Council Executive Director for the Panhandle-West Texas Council of the American Heart Association. She is the first Hispanic to be named to this position in the state of Texas. Honors include: 1992 Rookie of the Year for the American Heart Association, El Paso Division, and the Outstanding Women in Texas Government, Governor's Commission for Women in 1990.

▼ 80's

Rosalie Ortega Brockman (B.S. '81) is working toward her M.B.A. from the University of St. Thomas in Houston. She is a project engineering specialist for Dow Chemical, U.S.A. Dedicated to the advancement of minorities in education and particularly in engineering, she was a founding member of the Gulf Coast Alliance for Minorities in Engineering (GCAME).

Vicente Lombrana (B.S. '81; M.S. '85) was awarded his Ph.D. in biology from New Mexico State University in August 1992. He is an instructor of biology at New Mexico State University in Alamogordo.

Ruben Montoya, Jr. (B.S. '81) is a Senior Telecommunications Analyst, Corporate Systems and Computer Services, with Mobil Oil in Fairfax, Virginia. He has been with Mobil since 1982.

Theresa Swain Casarez (B.A. 1983) was in the first graduating class of UTEP's Honors Program. She is currently working as a Federal Investigator for the U.S. Equal Employment Commission in Dallas Texas, investigating employment discrimination.

Rick Johns (B.S. '83) is in his second year as an adult probation officer in Tarrant County, Texas with their Community Supervision and Corrections Department.

David Lombrana (B.A. '83) earned his Doctor of Jurisprudence degree from South Texas College of Law in May 1992. He is in private practice in Houston, Texas.

Skip Schmidt (B.S. '84) earned his M.B.A. in finance at Texas Tech University in May '91. He is a financial consultant with Merrill Lynch in Columbus, Georgia, where he resides with his wife, Martha.

Mark J. Ash (B.N. '85) received a Doctor of Jurisprudence degree from South Texas College of Law in December 1992.

Charles Etheridge, Ph.D. (B.A. '85), assistant professor of English at McMurry University, Abilene, Texas, has been elected recording officer for the university's College of Arts and Sciences faculty. A published author, Etheridge has recently had two papers presented to national conferences.

Teresa Souza (B.A. '85) has been named publications specialist for the Communications and Business Partnership Office of the El Paso Independent School District. She currently serves as secretary to the El Paso Chapter of the Public Relations Society of America.

Maria Alvarez (B.B.A. '86) earned her master's degree in business ad-

ministration from Columbia University in New York and is now a vice president with Chase Manhattan Bank of New York. Because of her work with disadvantaged children she will receive the Lewis Hine award from the National Child Labor Committee in New York.

Stella Quiñones (B.S. '86) has returned to UTEP to pursue her graduate studies in 1992. Her studies focus on effects of space on the aluminum clamps and bolts removed from NASA's Long Duration Exposure Facility. An advocate of minority education programs, she volunteers in that area and serves as a mentor for students. Quiñones has been a recipient of the Outstanding Young Women of America Award, a Burlington Northern Foundation Scholarship and an Alcoa Fellowship.

Brandon F. Johnson (B.B.A. '88) has been promoted to Captain (USMC). He is a bombardier/navigator flying the Intruder with attack squadron VMA(AW)-332 in Cherry Point, North Carolina.

Raul Ramirez (B.B.A. '89) received his master's in business administration from the University of Texas at San Antonio in December, 1992.

90's

Lance F. Brownlee (B.A. '92) has been named by J.D. Williams Insurance Company as account executive with the Wannell Montalbano Commercial Property and Casualty Team. He is a member of the El Paso Coalition for the Homeless.

Rosalind T. Sanchez, R.N. (M.S.N. '92) has been promoted to Director of Pediatric Services at Providence Memorial Hospital in El Paso. Her responsibilities include the Pediatric Intensive Care Unit, Outpatient Pediatric Oncology, and the Pediatric Emergency Transport Team (PETT) which she established and currently serves as a transport nurse.

Raymond H. (Rocky) Stone (B.B.A. '92) is the new Director of the Computer Applications Learning Center in UTEP's College of Business Administration.

William R. Sullivan, II, M.D. (B.S. '86) graduated from Texas Tech University Health Science Center, Lubbock, in May 1992 and has begun his residency training at the University of Arizona.

OBITS

Osmundo V. Nuñez, Jr. (B.A. '72) December 14, 1991. He was a resident of Seattle, Washington, and had been employed by U.S. West Communications, Pacific Northwest for over 17 years. Survivors include his parents, three sisters and a brother.

Thomas Michael Gruver (B.S.E.E. '78) May 23, 1992 in Littleton, Colorado. He was a senior engineer, and had worked for Boeing and Martin Marietta Aerospace companies. Survivors include his parents, two brothers and a sister.

Albert M. Schiemenz (B.S. '48) May 26, 1992 in San Antonio. He was an independent oil operator. At UTEP he was President of the Student Body, a charter member of Kappa Sigma and a football player. Survivors include his wife, Paddee (Condley), four children and six grandchildren.

James Lawrence (M.S.C.E. '70) October 26, 1992. He retired from the Texas Highway Department as District Maintenance Engineer after 37 years of service. He was a member of the Masonic Lodge Scottish Rite Bodies and a WWII Veteran. Survivors include his wife, Dorothy, two daughters, five grandchildren and two great grandchildren.

Jose Venzor, Jr. (B.A. '84) November 1, 1992. A lifelong resident of El Paso, he served in the Air Force and was an investigator with the Attorney General's Office. Survivors include his parents, three sons, one grandson, one brother, and five sisters.

Esther McDonald (B.S. '85; M.Ed. '90) November 4, 1992. A lifelong El Paso resident, she taught at Pasodale Elementary School and El Paso Community College. She is survived by her husband, James, two sons, one daughter and her parents.

Margaret H. Langford (M.A. '69) November 7, 1992. A lifelong resident of El Paso, she was a political science instructor and former member of the Board of Trustees of the El Paso Community College. Survivors include her husband, James, and two sons.

Albert H. Viescas (B.S. '30) November 13, 1992. He retired from El Paso Natural Gas Company in 1974 after 25 years service as an engineer. At UTEP he was Editor of the Prospector, Vice President and Treasurer of his Senior Class. He was one of the first Golden Grads to be honored at UTEP. Survivors include his wife, Eve, a son and daughter, two grandsons, a sister and brother.

Richard Lewis McConn (B.A. '48) November 24, 1992. He was a lifelong resident of El Paso and retired as Senior Vice President of El Paso Natural

Gas Company. He is survived by his wife, Marilyn, two daughters and three grandsons.

Roy Peña (B.A. '64; M.Ed. '71) November 25, 1992. He had been a lifetime contributor to education serving the El Paso Independent School District for 23 years, most recently as Principal of Andress and Jefferson High Schools. Survivors include his wife Hilda, two sons, one daughter, his mother and one brother.

William Lee Coulehan LTC/USA (RET) (B.A. '39) December 11, 1992. He was a native El Pasoan. He served with the U.S. Office of Strategic Services in WWII as a paratrooper, he fought alongside the French underground and parachuted behind Nazi lines to set up supply drops. His decorations included the Bronze Star and honors from the Peruvian and Brazilian governments. Survivors include his wife, Florence, five daughters, three sons, four grandchildren and a brother.

Wilbert D. Holt SGM/USA (B.A. '75) December 30, 1992. He was a veteran of WWII, the Korean and Vietnam conflicts. During his 26 years of service, Holt was awarded three Purple Hearts, and the Bronze Star. Since his retirement from the Army he had been business manager for the El Paso Employees Federal Credit Union, Radiology Associates and Newark Hospital. He is survived by his wife, Helga, two sons and two daughters.

William H. Dickson CW4/USA (B.S. '77) December 31, 1992. He was a veteran of WWII, and the Korean and Vietnam conflicts. Dickson was a resident of El Paso for thirty years. He is survived by his wife, Shirley, and five sons.

Leonard W. Bailes (B.A. '64; M.A. '71) January 1, 1993. He was a history instructor at El Paso Community College and a member of the American Legion Post #58. He is survived by his mother, one aunt and several cousins.

Elmer Grounds, Jr. (B.A. '49; M.A. '50) January 3, 1993. He was a teacher and school administrator in Texas and New Mexico for 39 years. He had been a member of the Board of Directors of the American Association of Secondary Administrators, member of Red Rose and Who's Who in Texas Education, and immediate past president of the Texas Retired Teachers Association. At the time of his death he was serving as interim superintendent of USID in Laredo, Texas. Survivors include his wife, Betty Ann, a daughter, two grandchildren, a brother and sister.

Joe Henry Alvarez, Jr. (B.S.Ed. '69) January 8, 1993. He was a lifelong resident of El Paso and the first "Teacher of the Year" at Del Valle High School. His dedication to providing opportunities in mathematics to His-

panic students led him to implement the YISD Mathematics Learning Centers. He is survived by his mother, Ofelia, two sisters, two nieces and one nephew.

Lawrence E. George, MSG/U.S.A. (B.S. '68) January 12, 1993. He was an Associate Professor at UTEP and had lived in El Paso for 12 years. He was a veteran of WWII, and the Korean and Vietnam conflicts and belonged to the VFW Yucca Post 8919. He is survived by his wife, Rafaela, and children.

Gerald R. Miller (UTEP Psychology Professor) January 14, 1993. He was a professor in the psychology department for more than 28 years, and was the author of numerous articles and papers. He was a member of the Border Chorders. Survivors include his wife, Alma, a son and daughter and his mother.

John A. Sinclair (B.S. '74) January 17, 1993 in Marshfield, Wisconsin. He was a veteran of the Vietnam conflict and worked as a correctional officer at La Tuna Federal Prison and a deputy director of West Texas Regional Adult Probation Department. Survivors include his wife, Lisa, two sons, two daughters and his mother.

George G. Matkin (past member of UTEP Development Board) January 20, 1993. He became president of the State National Bank in 1949 and was chairman of the board from 1967 until 1981. His civic interests were the American Red Cross, the Lee and Beulah Moor Children's Home and the Chamber of Commerce. His numerous awards include Outstanding Citizen from the El Paso Board of Realtors, the Annual Human Relations Award from the National Council of Christians and Jews and the Clara Barton Medallion which is the highest award given by the Red Cross. Preceded in death by his wife, Lucille, he is survived by two daughters, five grandchildren and fourteen great grandchildren.

The Sand Glass, the second book of poetry by Mardee de Wetter (College of Mines, Class of '44) is available from the UTEP University Library for \$25.00 plus \$2.50 shipping and handling. The proceeds from the sale of the book are added to the Mardee and Peter de Wetter Library Fund, which is used to purchase new volumes for the library.

Orders should be sent to the attention of Robert A. Seal, University Librarian, UTEP Library, El Paso Texas 79968.

HIGH LIGHTS

Biomedical research gets \$5 million boost

UTEP will soon be able to do quicker and more complicated research on border health issues such as cholera and environmentally induced cancer with a \$5 million grant to develop a Border Biomedical Research Center.

The five-year award from the National Institutes of Health's Research Centers in Minority Institutions program will pay for three new laboratories in which researchers will study biochemistry and molecular biology, cell culture, and analytical cytology. It also will fund the development of a biostatistics consulting lab, which researchers and doctors in the El Paso community will be able to use to compile and analyze statistical data about their patient populations.

New laboratory equipment will be used to further UTEP's research on gastrointestinal illnesses such as cholera as well as other biological and environmental factors that threaten the health of the border population, says Dr. Louis Irwin, UTEP's chairman of biological sciences.

The creation of the Border Biomedical Research Center is a major

step toward the development of a doctoral program in biology at UTEP, Irwin says.

Lady Miners Set Fire to the Court in a Winning Season

UTEP's Lady Miners were on a roll this season, breaking records and tearing up the courts in the best performance ever for a UTEP women's basketball team.

They unofficially own the all-time Western Athletic Conference attendance record after filling the stands with 7,103 cheering fans during a free-ticket game against Brigham Young University; they won a record-breaking 18 games when they defeated San Diego State late in the season; they entered the WAC Tournament in third place; and they were ranked fifth in defense in the nation.

Coach Sandra Rushing says the team's success this season began with good recruiting efforts by Assistant Coach Jason Conner.

"We are successful because these girls don't want to lose," Rushing explains. "They have a certain type of togetherness on the floor, fighting for each other."

Five new women were recruited for this season, the 17th year of women's basketball at UTEP. UTEP junior Apples Waddell, the Lady Miners' leading scorer, brought her talent all the way from Alan County Community College in Kansas. She can play any position on the floor and her desire to win is contagious to all the other players, Conner says.

Kathy Mangram, from Howard Junior College in Big Springs, Texas, was recruited as a guard because she is fast on the floor.

"Kathy's quickness was a big factor for us this year," Conner remarks. "She is a tenacious defender and rebounder and does a good job penetrating the defense and scoring."

Kemp, Texas, recruit Laura Walker is a guard who brought strong three-point shooting to UTEP.

Freshman Cabora Mack from Alamogordo, N.M., played center in high school, but she is making a transition to guard in the college game. And Lorna Ware, a forward from Odessa College, pumped



UTEP's defense with aggressive shot blocking.

"All five girls have played a vital role because they all come from winning programs," Conner explains. "They know how to win, which has given the team some consistency that has become a big part of our success."

All five will be back next year.

The women's basketball team has been supported in their fruitful season by the UTEP Intercollegiate Athletics Department and the Miner Foundation, as well as Church's Chicken and El Paso Good Time Stores.

A Driving Force in Women's Health

by Stacie Wilson

In contrast to the sterile room, cold tile floor, green uniform and stark white lab coat she was accustomed to as an Army nurse, Dr. Melinda Tinkle radiates warmth sparked by individuality that is colorfully apparent in her personal surroundings at UTEP. Her office is a converted old dorm room enclosed by pastel yellow walls spattered with prints of daisies and daffodils. Her wooden rocking chairs hold quilted pillows and sit atop large crafted throw-rugs.

Tinkle, who is called "Mindy" by co-workers, is the consummate health care professional. The vivacious associate professor is convinced she's found her niche in the nursing field. "I intuitively knew from the very beginning when I was in nursing school that I wanted to be involved in women's health. I loved labor and delivery and worked in that area for five years in the military. There's something so courageous about women. There are so many needs that are undervalued and underresearched."

As a professor in the College of Nursing and Allied Health, Tinkle created UTEP's first master's level nurse practitioner's program, which is in women's health. It is the only graduate nurse practitioner's program of its kind in West Texas. A nurse practitioner has more education and clinical experience than a traditional nurse and can assess, diagnose, and treat common health problems. Referral to a physician occurs as needed.

But Tinkle's endeavors reach beyond the confines of the university setting. She also works with Providence Memorial Hospital to tap into the community, eliciting recognition of neglected women's health issues – the passion of her career.

"Providence wanted to have women's services all in one location so that women can see a physician, have tests and get information without having to run all over town," explains Joyce Taylor, Providence administrative assistant and liaison between the hospital and UTEP.

In response to the hospital's goal, Tinkle designed and implemented an educational component for the hospital's existing women's center. Through the new component – The Health College – UTEP's College of Nursing and Allied Health presents a series of seminars designed to provide women with practical health information, educate them about their own well-being and teach them about health services to which they have access.

"The Health College empowers women by exposing them to health issues and giving them a sense of real control over their own situation," Tinkle notes enthusiastically.

"If this is anybody's project, it's Mindy Tinkle's project," Taylor says. "Her ideas are terrific and the way she conceptualizes the program is really the driving force. She is an excellent person to connect with the hospital."

The curriculum targets women of all ages and offers them a comfortable and supportive atmosphere. Seminars explore topics such as women and depression, their relationships, medical and reproductive health, leadership, stress management, conflict management and retirement.

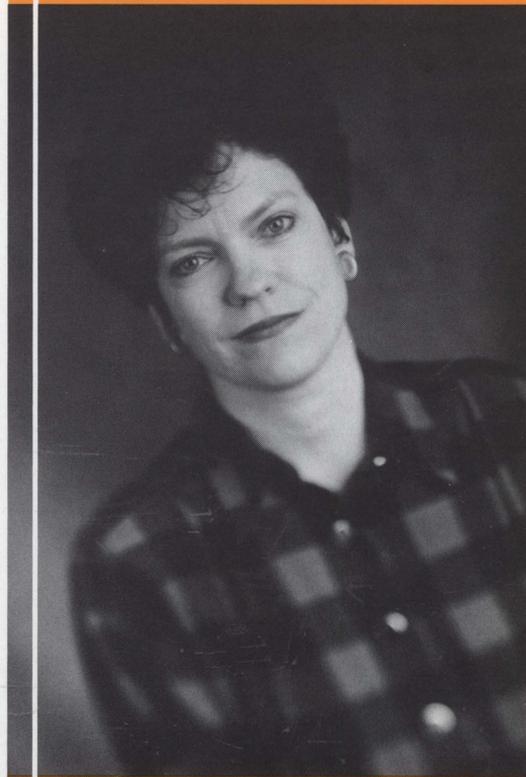
"The Health College reinforces our involvement with the community and health care agencies," says Audree Reynolds, graduate nursing program coordinator. "Mindy has cemented the relationship between UTEP and El Paso health care agencies to serve the community."

Along with community service, directorship and teaching, this mother of three stretches herself to the limit with research projects that delve even further into women's health issues. Tinkle and UTEP nursing professor Dr. Maria Amaya recently completed research on Human Papillomavirus in Hispanic women and are beginning a study involving the screening of lead and Dichloro Diphenyl Trichloroethane (DDT) levels in pregnant Hispanic women and their infants. In the United States, DDT is an illegal pesticide.

Tinkle is a certified women's health practitioner with a doctorate from the University of Texas School of Nursing in Austin, a master's degree from The University of Texas Health Science Center in San Antonio and a bachelor's degree from Texas Women's University in Denton.

The energetic director/professor is focusing her attention on nurturing the many projects she has begun in her three years at UTEP. She says she hopes to win further recognition for the nurse practitioner program, work on obtaining a solid base of extramural funding for a research program targeting women's issues and develop a research center for nursing at UTEP that will open doors for a doctoral program in nursing.

DR. MELINDA TINKLE



"There's something so courageous about women. There are so many needs that are undervalued and underresearched."

FACULTY

PROFILE



PAT CASTIGLIA

Dean of the
College of Nursing &
Allied Health

by Robert
McCorkle

On a fortuitous day four years ago, Dr. Pat Castiglia, then associate dean of State University of New York's School of Nursing, flew to Chicago to attend a meeting called by the W. K. Kellogg Foundation. She arrived from Buffalo just in time to be among the last few of the 800 eager health educators and others to squeeze into the room before the organizers locked the doors.

What Castiglia heard struck a resonant chord in the longtime nurse and health educator. She knew that health care in the United States had to change but wondered where she would fit in the brave, new world.

Representatives of Kellogg, a Battle Creek, Mich., philanthropic organization, were offering an opportunity for health education institutions to join a ground-breaking venture to redirect the way health educators are trained and change the way health care is delivered at the community level. Having been to El Paso before, she knew instinctively that the community-based, primary health care system Kellogg was touting would be a natural along the border.

Ironically, Castiglia ended up taking over the reins of the UTEP College of Nursing & Allied Health and later was selected as a principal investigator for a Kellogg Foundation proposal. UTEP's proposal was one of seven U.S. projects to receive \$6 million in funding and is now being implemented in El Paso County as the Institute for Border Community Health Education. Castiglia serves on the institute's board of directors.

As the energetic dean of the College of Nursing & Allied Health, Castiglia supervises the college's burgeoning programs. Undergraduate programs include nursing, health science, kinesiology/sports science, medical technology, speech-language pathology, physical and occupational therapy; graduate nursing programs are nurse midwifery, women's health care nurse practitioner, nursing administration, adult health, parent-child health and psychiatric-mental health. There is also a continuing education department to help faculty with professional development and training to keep their licenses and certification up to date. At present, there are about 50 full-time faculty and roughly 1,400 students in the nursing college.

■ When you took over the UTEP nursing program as dean, what did you see as the special health challenges facing the border community?

There was the very rudimentary beginning of people in health education recognizing there were special needs and something needed to be done.

I saw tremendous health problems, many stemming from the environmental situation. We had the components of a health science center split between two universities – Texas Tech's Regional Medical Center stood alone and UTEP's College of Nursing & Allied Health had most of the other components one would find in a health science center. The need to work collaboratively with the medical school was obvious.

UTEP was actually a little ahead of most other university programs in that we had not one, but two, community health courses. But most programs had not done a good job of going into the community to find out people's needs. Instead, we presented ourselves to them and said, 'Here we are, here's what we can do for you.' Perceptions of need often differed.

N So, what did you find out the people wanted and needed in the way of health services?

If you ask most people what they want, they'll say they want a doctor available when they're sick. Our perception is that they have other kinds of needs – for nutrition education, health maintenance (i.e., annual physicals), immunizations and the like. But the average person doesn't recognize that. While we want them to be able to see a doctor or nurse practitioner when they're sick, we also want to go beyond that and have people take more responsibility for themselves to ensure they have good health. So, the model we're building has many components, some of which encourage people to become politically, socially and economically aware of what it's going to take to have good health.

N More specifically, in community surveys what have the Kellogg project workers discovered are the greatest health needs in the Lower Valley?

Respiratory problems. Certainly, tuberculosis has been a major problem here and is now being recognized throughout the U.S. as a major health problem. Asthma, hepatitis A and

dysentery are some others. We're hoping the situation will improve with the installation of water lines and sewerage in the colonias. Also, the dental needs of the people are terrific. Since we don't have a dental school in El Paso, the next best thing we could do was establish a dental residency program. We brought in Dr. George Farinacci from the UT Health Science Center's Dental School in San Antonio, who'll be establishing a dental residency program at Thomason Hospital.

N How do UTEP's nursing and allied health graduates compare with those from other universities?

We stack up extremely well. UTEP's medical technology students recently took their national board exams and exceeded the national average. Our Speech Language Pathology program is very innovative and being recognized for its new, five-year master's program, the only five-year master's in that field in the nation. Those graduates are doing quite well. That's just two examples.

N In the past three years since you came to UTEP, how much has the college grown and in what ways is it breaking new ground?

The undergraduate nursing program has grown about 15 percent, while our graduate program has remained static as we've added new programs in women's health, nurse midwifery and nursing administration. Accreditation standards limit how many students we can enroll in certain programs, so we can't expand them significantly. Medical technology enrollment is up significantly. Allied health was a small component, but enrollment doubled when we blended together the health sciences and health education program in the College of Education with what had been allied health. The new OT/PT (Occupational Therapy/Physical Therapy) programs will increase the enrollment even more. Then there's kinesiology and sports studies. We've gone from three programs to seven and from about 900 students to about 1,500,

which doesn't count the many pre-professional students whom we're advising.

Another thing people don't know about this college is that we're a designated interactive computer training center. One of my goals was to build up our learning center from a facility 15 years behind the times to one of the best on campus with computer graphics, a slide maker and so forth. We are reaching that goal with little or no resources thanks in large part to Rolfe Sassenfeld, who's in charge of the center. Since we're not on the main campus and our students don't have ready access to computing facilities, it's most important that we have a quality facility here with expert people available to help students and faculty.

N What does the future hold for the College of Nursing & Allied Health?

What I think we'll see is a greater emphasis on courses at the graduate level and at least one more nurse practitioner program. We're also expanding clinical nurse specialist programs because that's the direction that Texas is going – with nurses prepared to function in a very consistent manner in a particular circumscribed area, such as cardiology or women's health. I think we'll see graduate programs in medical technology since there's such a tremendous need in that area. There'll be a restructuring of kinesiology and sport studies; the new faculty are interested in research related to muscles and nerves. Therefore we'll see more students involved in that type of research.

We need a doctoral program in nursing, but that's still six to 10 years away. We need faculty with large externally funded research in order to implement a doctoral program. We're well on our way with funded research projects in the areas of lead toxicity, human papilloma virus and cancer ■.

NELLIE CASHMAN

Prospector and Trailblazer

by Suzann Ledbetter

**“One of the
West's most
fascinating
women,”**

says Arizona novelist Jeanne Williams of the irrepressible Nellie Cashman (1850?-1925). Pioneer searcher for the Mother Lode, Cashman's name was known in mining camps from Tucson and Tombstone to the Cassiars in British Columbia and Dawson in the Yukon Territory. Suzann Ledbetter's lively story of this Irish-born trailblazer is the first serious study of this significant Western figure.

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