



REACHING FOR THE STARS Casey Papovich's fascination with space began as a child watching sci-fi movies. Now his work focuses on unraveling the mysteries of the universe.

Galaxy Hunter

Aggie astronomer's discovery of 10-billion-year-old cluster follows lifelong fascination ignited by *Star Wars*

Inspiration often can be found in the darkest of places. For Texas A&M University astronomer Casey Papovich, it was a movie theater in Florida in 1977 during a family vacation where, as a 4-year-old, he sat mesmerized as a story of stellar empires, intergalactic warfare and distant planets played out on the big screen in front of him.

Star Wars continues to captivate a spellbound international audience to this day, but back then, the blockbuster epic held far greater appeal than toy light sabers and Darth Vader masks for the young Papovich, who found himself sucked in not by the ultimate battle of good versus evil but rather a greater unknown — space.

To the self-described “hyperactive” child and “classic nerd,” science fiction represented an enjoyable, often therapeutic escape — a reverie that reached an early and unmistakable zenith in third grade, when his unsuspecting parents gave him a gift, the National Geographic picture atlas, *Our Universe*. The book, which detailed the ins and outs of the cosmos, quickly became his astronomical bible, consulted to the point that the only thing binding it — and, conversely, his future — was electrical tape. Transfixed by the mystique of a largely unexplained universe and caught up in an irresistible tractor beam of innate curiosity, Papovich was rendered powerless as his interests took an abrupt left turn from the make-believe worlds of alien monsters with superpowers toward the cosmos and its equally intriguing reality. From that point on, his calling was clear.

Nearly 30 years later, Papovich fondly recounts his childhood in Prince William County, Va., as he sits in his fourth-floor office in the George P. and Cynthia Woods Mitchell Institute for Fundamental Physics and Astronomy next to the George P. Mitchell '40 Physics Building — the 200,000-square-foot, state-of-the-art home base for Texas A&M astronomy. No less enthused by the ethereal as an adult, he still remembers why his interest took that definitive turn toward the stars.

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A&M System Responds to Gulf Oil Spill

When the Deepwater Horizon oil spill began to spread into the Gulf of Mexico toward the U.S. coastline following the April 20 rig explosion, internationally known experts from The Texas A&M University System were among the first called upon for help. In the ensuing months, efforts have ranged from analyzing the causes of the blowout to researching the long-term effects on the Gulf's wildlife and environment to analysis at Texas A&M AgriLife of ways to replenish shrimp stocks.

Among the first system members to respond was the Texas Engineering Extension Service, whose experts in oil spill control and response helped train contractors and volunteers involved in cleanup operations. TEEX later provided similar specialized training to members of the Texas State Guard.

Theresa Maldonado, associate vice chancellor for research at the A&M System, also began an immediate and ongoing effort to identify and provide resources to respond to the spill. With the assistance of Robyn Pearson of the Texas A&M Energy Engineering Institute and others, she created a database of institutes, centers, multistate consortiums, and system experts. The database continues to be widely used and expanded for investigation of the Gulf spill and planning for future offshore deepwater exploration worldwide. [For database information, contact Maldonado via LLGroce@tamu.edu.]

As the magnitude of the spill, eventually to reach 4.9 million barrels, began to unfold, system resources and experts were called into service by the federal government. Gene Beck, assistant professor of petroleum engineering at Texas A&M University, was one of two expert witnesses who offered testimony during a May 11 United States Senate hearing on the spill.

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TROUBLE IN THE GULF Smoke plumes from the explosion of the Deepwater Horizon foretold the tragedy of the coming months.



TRAINING EXERCISE U.S. Coast Guard students assist in recovery of containment booms, passing them to the equipment deployment barge for the close of operational period recovery operations.

Chancellor's Summit on Teacher Education

The Texas A&M University System's historic mission to train top teachers for the state of Texas advances to a new level in Austin Oct. 3-5 with the Chancellor's Summit on Teacher Education. This unprecedented event hosts educators and administrators from the Texas A&M University College of Education and Human Development and the Colleges of Arts and Sciences throughout the A&M System. The programs will focus on increasing the quality of teacher preparation and celebrating the accomplishments of system teacher education programs.



For information on registration, contact Irma Harper, assistant vice chancellor for academic affairs, at (979) 458-6044.

Energy Surge

Into the future with Theresa Maldonado and the Texas A&M Energy Engineering Institute

Theresa Maldonado has always been aware of the odds. On the day she took her seat in an electrical engineering classroom at the Georgia Institute of Technology in 1979, she knew the chances of a female student being there were two in 100. In some advanced math classes, she would be the only woman in a class of 80. At the same time, she knew the probability of finishing her degree was 100 percent and not in some abstract statistical chart, but in the reality of her own mind. Long odds simply increased her determination. As part of an Air Force family, she had attended 13 different schools between kindergarten and 12th grade and was imbued from an early age with the determination to excel.

“When I was growing up, I was taught that school should come after all of my other responsibilities at home — it's a cultural thing,” she says. “And over the years, I have had to listen to comments from others who said that I shouldn't be studying math and engineering.”

So much for that. She graduated with a master's degree in electrical engineering from Georgia Tech, went to work for awhile in the industry and completed her Ph.D. in 1990. Today, as associate vice chancellor for research at The Texas A&M University System and director of the Texas A&M Energy Engineering Institute, Maldonado has forged a

career that has taken her to the top ranks of her field and to one of the most important challenges in research—the future of energy.

The EEI was created in 2009 as a part of the Texas Engineering Experiment Station to engage in basic, applied, and applications research and technology development across a broad spectrum of energy resources and systems, from nuclear power to wind energy. EEI works with energy companies, government agencies, existing TEES laboratories, A&M System universities and agencies, and other energy partners.

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ALWAYS ON THE GO Theresa Maldonado during a visit to the Offshore Technology Research Center.

Notes from the Chancellor

MICHAEL D. MCKINNEY, M.D.

BETTER TEACHERS, STRONGER TEXAS

An old advertising line said that “progress is our most important product.” I think that applies to The Texas A&M University System as well, but I would focus it a little more:

“Teachers are our most important product.”

Certainly we are engaged in global research and explorations and expansions of all sorts in this great system, but let’s not forget what we are really all about: teaching. Teaching leads to all the other achievements. Teaching builds students, and students build Texas. Texas builds the nation and the world.



MAKING A DIFFERENCE Teachers like Dr. LaVelle Hendricks from Texas A&M University-Commerce are working to educate and inspire their students.

In October, we will host the Chancellor’s Summit on Teacher Education that will focus on the great teaching that our system has produced and on the best ways to continue to provide the best teachers in this state. We already produce the most of any university system in the state by far.

And we must continue to do so. As Texas moves into the next generation, and the one after that, we face decidedly sobering projections in the decline of real income. Much of this decline will be due to a workforce that will be increasingly under-educated—unless we do something about it.

As chancellor, and with your help, I intend to.

Teaching is not the most highly paid field in our economy, nor in some ways the most glamorous. As a son of teachers I know that quite well. But I also know it is among the most rewarding of all professions and the most respected. Yet it’s even more than that. Teaching is the bedrock of all paths to the future. We have to make that path stronger in the face of a challenging world, and we will.

Through gatherings such as the Chancellor’s Summit, through programs such as the “Life is Loud” campaign to recruit math and science teachers, through honors such as our Teaching Excellence Awards to reward those who devote their best energies to students, and through unyielding support for teacher education programs at our universities, we are committed to preparing those who pledge their careers to preparing all of us. ✳

News Briefs

TEEX receives Pro Patria Award for supporting employees in the reserves

The Texas Engineering Extension Service has received the statewide Pro Patria Award from the Texas Committee for Employer Support of the Guard and Reserve. Only six employers were selected for the prestigious award out of 900 nominated by their employees serving in the Reserves. The “Pro Patria” Award, from a Latin term meaning “for one’s country,” is the highest award the state committee bestows on an employer in recognition of programs and policies that go above and beyond statutory expectations in supporting their employees serving in the Reserve components. Approximately 24 percent of TEEX’s 500-plus permanent salaried employees are military veterans, as are many of its 800-plus part-time wage employees.



FALL 2010 TEACHING EXCELLENCE AWARDS The Texas A&M University System’s Fall 2010 Teaching Excellence Awards mark their fifth semester honoring the system’s best teachers as chosen by their students. To date, 593 faculty members have received more than \$2 million in awards in the voluntary program. All faculty members who teach at least a 3-hour course are eligible.

Photo: Texas A&M University-Commerce president C.B. Rathburn III (far left) and A&M System Chancellor Michael D. McKinney (far right), present Teaching Excellence Awards to the university’s recipients. From left: Tom Wagy, Vickie Higgins, Richard Herrera, and Victor Govindaswamy. Not pictured: Callie Fortenberry, Selena Jefferies, Janis Overlock, and Leonard Peck.

For more information, and for a list of past winners, go to www.tamus.edu/offices/academic/awards/chancellor.html

Texas A&M ranks top in Texas for return on investment

Texas A&M University ranks first among public institutions in Texas in return on investment – what a graduate earns compared to typical college costs incurred – according to listings posted online by PayScale Inc. The online firm that compiles employee salary data nationally shows Texas A&M to have a 12.7 percent ROI, based on its typical costs, using a 2009 basis, compared to its 30-year ROI adjusted to reflect 2010 dollars. Texas A&M’s ROI, as shown in the survey, is even better than that for the two top-rated schools, MIT and Cal Tech, both of which had ROIs of 12.5 percent. The major determination in PayScale’s numerical rankings is the total cumulative estimated net salary for 30 years, combined with several other factors.

A&M-Commerce art direction/copywriting program named best in U.S.

The art direction and copywriting program at Texas A&M University-Commerce was named the best in the United States for 2010 by *CMYK Magazine*, a quarterly art-design magazine distributed to creative directors, agency principals and art buyers nationwide. During the 2009-10 school year, art direction students won multiple Addy Awards, with some receiving international recognition at the One Show in New York. Photography students also had a strong showing at the 2010 National Student Show for photography, presented by the Dallas Society of Visual Communications.

WTAMU to open Buffalo Sports Park

West Texas A&M University’s much-anticipated Buffalo Sports Park is on schedule to open in November. The \$21.8-million project entails a complete refurbishment of the campus from east of Jarrett Hall and north to the former site of the university’s Wind Test Center. A major part of the construction was completed in August. The Buffalo Sports Park will be a premiere Division II intercollegiate athletics complex for baseball, softball, soccer, and track and field.

A&M-Texarkana receives largest private gift in history of university

Texas A&M University-Texarkana recently received the largest private gift in its history, a \$10 million investment from Anita and Truman Arnold to establish The Anita and Truman Arnold Scholars Program. The establishment of the scholars program is the latest in a series of ongoing contributions by the Arnolds to A&M–Texarkana. Recent contributions include the donation of 72 acres of land for university campus development; a \$1.2 million commitment for funding a chair of the Department of Information Sciences; and a \$300,000 commitment for funding the attainment and appointment of additional faculty required for opening a College of Engineering.



PVAMU QUIZ BOWL TEAM CAPTURES UNIVERSITY’S FIRST CHAMPIONSHIP A student team from Prairie View A&M University claimed a \$50,000 prize as it emerged as national champions of the 2010 Honda Campus All-Star Challenge. The undefeated team claimed victory after defeating Mississippi Valley State University (265-195) in the final competition. The team gained the university’s first ever championship title in the annual academic competition among the best and brightest students who attend the nation’s Historically Black Colleges and Universities.

From left: George Wright, president of PVAMU; team members Jonathan Gholston; Gabrielle Washington; Edward Hackett; Cedrick Wilson; Isaac Hoyt; Herbert Thomas, coach and campus coordinator; and Marc Burt, senior manager, Office of Inclusion and Diversity for American Honda Motor Co., Inc.



Student Regent: Cresencio Davila

Cresencio Davila, family man and student, can now add student regent for The Texas A&M University System to his resume. His recent appointment by Gov. Rick Perry to serve as a member of the board began June 1 and will expire May 31, 2011.

A liaison between students and the board, Davila also brings a unique personal perspective as an advocate for lower income and nontraditional students.

A former director of the United Latin Ministries, Davila was instrumental in the founding of a private Christian school. He also was co-founder of a division of the Student Government Association for Texas A&M University-San Antonio where his team started several programs including Youth Service Day, President’s Roundtable and student forums.

The busy new student regent also is a former member of the A&M-San Antonio President’s Student Advisory Council, served on the Chancellor’s Student Advisory Board Executive Committee and was president of the Delta Beta Chapter of the Delta Mu Delta Fraternity. A Texas A&M University-Kingsville graduate, Davila is currently pursuing an MBA degree at the new San Antonio campus. ✳

Texas A&M Institute for Genomic Medicine Awarded \$12.25 million Defense Department contract to combat agents of biological terror

The Texas A&M Institute for Genomic Medicine has been selected by the Defense Threat Reduction Agency to identify and develop new drug targets for certain toxins, viruses and bacterial pathogens. By discovering and ultimately developing strategies to eliminate the ways in which toxins and microbes hijack cells, this research has the potential to discover new vaccines and therapies to counteract the most dangerous biothreats faced by both military personnel and civilians.

Two Texas A&M researchers receive NSF grants to study impact of oil spill on the Gulf

John Kessler, an assistant professor in the Department of Oceanography at Texas A&M University who specializes in ocean chemistry, has been awarded a \$160,000 grant from the National Science Foundation to examine methane gas in the Gulf oil spill. Thomas Bianchi, a Texas A&M chemical oceanographer, has been awarded a \$117,000 grant to conduct immediate research on the impact of the Gulf oil spill. The grants are believed to be the first of their kind awarded to any university researcher. Bianchi and colleagues Robert Cook of LSU and Michael Perdue of Georgia Tech will analyze current conditions of oil-soaked marshes near the communities of Terrebonne and Barataria, La.

Texas A&M chemistry professor receives grant to research new energy initiatives

Hongcai “Joe” Zhou, professor of chemistry at Texas A&M, has been selected as one of 37 scientists nationwide to share in a total of \$106 million in new grants through the United States Department of Energy intended to help reshape the country’s energy future. The grants will fund a variety of innovative research initiatives with the power to dramatically improve the way the country uses and produces energy.

Texas A&M System receives more than \$1.1 million from CPRIT for cancer research

In March, The Texas A&M University System was awarded \$1.1 million from the Cancer Prevention and Research Institute of Texas to provide support for cancer-related research by two professors. The funds, part of CPRIT’s \$61 million inaugural grants, will support research projects under the direction of Robert Chapkin, professor and University Faculty Fellow in the Department of Nutrition and Food Sciences in Texas A&M’s College of Agriculture and Life Sciences, and Darwin Prockop, professor of molecular and cellular medicine and holder of the Stearman Chair in Genomic Medicine at the Texas A&M Health Science Center. Prockop also is director of the Institute for Regenerative Medicine at the center.

Texas A&M professor wins grant from Texas Space Grants Consortium

Nicole Zacharia, an assistant professor in the Department of Mechanical Engineering at Texas A&M, has been awarded a grant from the Texas Space Grant Consortium New Investigator Program for her materials research. Zacharia will work on “smart” textiles, which can be used to incorporate functionality into uniforms. These functionalities include actuation, sensing and health monitoring, protection to environmental stimuli, and power storage. The work will focus on electrically conducting films and simple electrochemical cells on various types of textiles.



PRESERVING THE PAST *Peter Fix (second from left) and members of the conservation crew work on the hull of La Belle before immersing it in a vat of polyethylene glycol.*

For Texas, for France, for the Ages

Texas A&M researchers protect the last remains of La Belle for restoration

The hull of La Belle, a light frigate recovered from its underwater grave in Matagorda Bay where it sank in January 1686 carrying 43 souls, now lies in a vat of oily preservative on the Riverside Campus of Texas A&M University. But not for long. Soon, researchers will take the carefully tended timbers apart and place them in a state-of-the-art freeze dryer big enough to hold a few head of cattle. Within three years, the hull will be reintroduced to the world, reassembled as part of a keynote exhibit in the center of the Bob Bullock Museum in Austin.

In 1996-97, researchers from Texas A&M aided in the Texas Historical Commission’s excavation of the ill-fated ship of famous French explorer Robert Cavelier, Sieur de La Salle. In 2000-01, the recovered hull was transported for painstaking reconstruction to the Conservation Research Laboratory at the Riverside campus, a division of the Center for Maritime Archaeology and Conservation.

The massive freeze-dryer, with its cutting-edge technology, is essential to preservation. At 40 feet in length, with an 8-foot internal diameter, it is the largest such machine for conservation use in the hemisphere, says Peter Fix, the maritime center’s assistant director and project conservator for La Belle.

“We will take a piece of the ship, make a mold for each piece of timber to accurately mimic the curvature of the hull, put it in the freeze dryer and in four to six months, the freeze-drying process will slowly sublime the water from the timber,” says Fix. “It’s a much gentler process than straight dehydration, and it is slightly revolutionary in that no one has tried it before, simply for the fact that an awful lot of engineering and understanding of the complex shapes of the ship have to be compensated for in advance of freeze-drying.”

Donny Hamilton, head of the university’s anthropology department, says the new method will reduce the time by about three years and cut the costs by more than a half million dollars. That’s important,



CREATING A PERFECT REPLICA *Glenn P. Grieco has completed two 1:12 scale models of La Belle. One is on display in the Anthropology Building at Texas A&M and the second at the Texas Maritime Museum in Rockport.*

Glenn P. Grieco, a research associate at Texas A&M who has built two models of La Belle, says the archaeological remains provide a case study of a little-understood vessel type and as an example of several construction techniques used in French shipyards at the end of the 17th century.

The three-masted ship carried six cannons and eight swivel guns when it sank in 12 feet of water in Matagorda Bay during a winter storm in 1686. But the muck that tripped up the ship also protected its hull and many of its contents until it was found and recovered more than 300 years later, in 1996.

Numerous artifacts, including lead shot, weapons and trading beads, already have been preserved and are displayed in the La Salle Odyssey Project, a cooperative venture of seven Texas Gulf Coast museums that tells La Salle’s story.

Fix says what the researchers from the lab are doing is important on many levels. “It’s important to everyone because it is a bit of Texas history. It’s equally important to people in France because it’s a remnant, a trace of their history,” he says. “It’s physical and tangible. You can go to a museum and you can look at this ship and you can say, ‘How did 42 or 43 people ever fit on this,’ where you may not get the same understanding if you just look at a drawing in a book.” 🍷

KELLI LEVEY is assistant director of marketing and communications at Texas A&M University.

To learn more about the La Belle:
www.thc.state.tx.us/lasalle/lasdefault.shtml
www.museumofthecoastalbend.org/lasalle.html

See the preservation process on YouTube:
www.youtube.com/watch?v=T83kLPtdcA



ATTENTION TO DETAIL *Assistant research specialist Helen Dewolf works to restore a weapon found on board.*

Recent Appointments



THOMAS G. BOGGUS was named director of the Texas Forest Service in February by The Texas A&M University System Board of Regents. A veteran forester, Boggus has spent the last three decades working for the agency. He was working as the associate director for forest resource development and sustainable forestry when he was tapped in May 2008 to serve as interim director, replacing retiring director James Hull.



BRETT CORNWELL was appointed associate vice chancellor for commercialization for the Texas A&M System in June. He previously served as the system's director of commercialization services. In his new role, Cornwell will direct the Office of Technology Commercialization. The OTC commercializes the intellectual property of the Texas A&M System and creates new companies that develop products and services around system-developed technologies. The OTC obtains intellectual property protection for system inventions to create licensing opportunities for industry partners.



MARIA HERNANDEZ FERRIER was named the inaugural president of Texas A&M University-San Antonio by the Board of Regents in February. Ferrier had served as interim president of A&M-San Antonio since June 2009, and was named president following a nationwide search. Ferrier began working with the university as executive director when the institution was a system center of Texas A&M University-Kingsville. Under her leadership, the system center accomplished many key objectives, including the approval of the master plan for the permanent campus, the passing of funding legislation, and the growth of academic programs and enrollment.



HEATHER MANLEY was named director of operations and business development for the Institute for Innovative Therapeutics in August. Manley has extensive professional experience in federal biodefense programs at both the Defense Advanced Research Projects Agency and the Office of the Secretary of Defense. Most recently, she was a member of the senior leadership team for the Transformational Medical Technologies program within the Defense Threat Reduction Agency, a more than \$1.7 billion defense initiative to guarantee biosecurity against infectious threats. She holds a Ph.D. in biomedical research—molecular neuroscience from the Mayo Graduate School in Rochester, Minn., and did her post-doctoral work in the area of biological toxins.



PAUL MEYER has been named vice provost at Texas A&M University-Corpus Christi. Meyer works directly with the university provost and is responsible for the university's educational leadership and planning, the utilization and development of policies and procedures that support quality academic programming, and the supervision of academic affairs personnel.



MARC A. NIGLIAZZO was named the inaugural president of Texas A&M University—Central Texas in April by the Board of Regents. Nigliazzo had served as president of Arizona Western since 2009. He brings a wide range of administrative and academic experience to A&M-Central Texas, having served as president of Temple College and Galveston College, and chair of the department of English at Del Mar College in Corpus Christi, among other positions. Nigliazzo obtained his B.A. in English at the The University of Texas at Austin, his M.A. in English at Texas A&M University and his Ph.D. in English at The University of New Mexico.

A&M System Expands Military Friendly Initiatives

The Texas A&M University System's Project Military Friendly moves into its third year with steady signs of progress and enhancement of programs to assist veterans, active duty personnel and dependents. In March, Texas A&M University was one of four universities selected to be a partner in the Tillman Military Scholars Program, founded by the Pat Tillman Foundation to honor the former NFL player who enlisted after the 9/11 bombing and was killed in Afghanistan in 2004.

Six Texas A&M students were selected as Tillman Military Scholars for a total of \$40,000 in scholarship funds. The national program will award \$3.6 million annually in scholarships. This fall, Texas A&M begins its Veteran Mentors program in partnership with ATMentors, offering faculty and staff who are veterans to serve as mentors for current veteran or military students.

In July, the A&M System hosted its second annual Project Military Friendly Symposium, held this year on the campus of Texas A&M University-San Antonio. Among the speakers were Texas Sen. Leticia Van de Putte, chair of the Senate Veteran Affairs and Military Installations Committee; Brig. Gen. (Ret.) Karen Rankin, chair of the Texas Veterans Commission; and Dr. Kathryn Kotrla, associate dean of the College of Medicine at the Texas A&M Health Science Center in Round Rock and a founder of the innovative outreach program TexVets: Partners Across Texas.



TAKING A BREATHER *A&M-Corpus Christi graduate Trevor Cuaz earned a degree in criminal justice.*

Elsewhere across the system:

The Texas A&M Health Science Center hosted a June workshop to review goals and plans for developing a military friendly initiative. The HSC campus has been visited frequently this year by military officials including Maj. Gen. David A. Rubenstein, the U.S. Army Deputy Surgeon General, and by senior recruiting officers from the Army's 5th Medical Recruiting Battalion and the 369th Recruiting Group of the U.S. Air Force.

Prairie View A&M University has created a new position to oversee the university's efforts to achieve a military-friendly designation. The veterans' affairs coordinator will serve as the primary campus liaison to agencies, groups, veterans, and their families.

Texas A&M University-Commerce and the **University of North Texas** signed an agreement in March that will allow A&M-Commerce students to participate in the Air Force Reserve Officer Training Corps program on the UNT campus. A&M-Commerce (formerly East Texas State University) hosted the nation's first AFROTC program on campus from 1949-1991. Throughout that period, the Air Force commissioned more than 880 officers while hundreds of others participated in the program.

Tarleton State University and **Texas A&M University-Corpus Christi** were named military-friendly schools by the nationally known publication *G.I. Jobs*.

Texas A&M University-Central Texas received an endowment scholarship fund for ROTC students honoring Cadet Russell Streightiff, who died following an accident in 2008, a year before he was scheduled to be commissioned through the university's ROTC program. 🇺🇸

Talented with Toxins

Texas A&M-Kingsville undergraduate already a published author

When Esteban Cantu was boy, he wanted two things: a gentleman's suit and a lab coat. Today the Texas A&M University-Kingsville graduate has both, plus an impressive array of published scholarly articles. Not bad for an undergraduate.

Cantu earned his bachelor's degree in biology last spring with the credentials of an established researcher. He already has three articles that have been published in scholarly journals, with a fourth pending. This is just the beginning of an academic career that he hopes will bring him back to the classroom.

Cantu's father works in construction and his mother is a homemaker, but their son had his sights set on the world of academia and research from a young age. He started working as an undergraduate researcher as a freshman at Texas A&M-Kingsville and quickly demonstrated his passion and abilities. He now works with internationally known scientists at the university's National Natural Toxins Research Center. Examining the properties of biomedically important molecules found in snake venom led to Cantu's published articles.



NEW HOME *Last year a ribbon cutting was held for the new serpentarium, home to one of the largest research collections of venomous snakes in the world.*



PASSION FOR RESEARCH *Esteban Cantu feels most at home in the lab and plans to fulfill his dream of being a researcher by attending graduate school and majoring in chemistry.*

In addition to his extensive research work, Cantu has represented the university as a presidential ambassador for four years, helps teach martial arts at the University Baptist Church and has put in extensive volunteer hours with the Las Manos group at the John E. Conner Museum.

He is now preparing for his graduate work at Texas A&M-Kingsville, but he will switch his studies to chemistry. Cantu's long-range plans include a doctorate in biochemistry and/or molecular biology and his own lab and teaching career at a university where he can share his love of science with others. "I want to teach," he says, "so I can get the future generations excited about science like I am." 🇺🇸

JULIE NAVEJAR is a communications specialist with Texas A&M University-Kingsville.

Cantu was recently featured in an episode of the A&M System's "Dimensions" web series about the National Natural Toxins Research Center: www.tamus.edu/video/dimensions/kingsville

‘Life is Loud’ Campaign Rooted in Real Lives at TAMIU and Tarleton

When The Texas A&M University System’s Mid-Career STEM Teacher Education Program sought actors for its multi-media “Life is Loud” campaign, what better place to turn than to the system’s own campuses?

Developed in partnership with Texas Regional Collaborative for Excellence in Science and Mathematics Teaching and the Texas Education Agency, the “Life is Loud” campaign positions today’s classroom as a sanctuary where dreams can be made real. By doing so, it hopes to identify, recruit and graduate 50 new math or science teachers a year to help address Texas’ critical teacher shortage.

Oscar Widales Jr., a 2009 graduate of Texas A&M International University and a graduate of the university’s alternate certification program, was cast as a teacher in the series. That’s not too much of a stretch for Oscar — he’s a math teacher for Laredo’s United High School.



CALLLED TO TEACH *Oscar Widales stands in front of Elgin High School, where the “Life is Loud” commercial was shot. Widales teaches math at United High School in Laredo.*

He says the campaign’s message resonated deeply with his daily teaching.

“I try to not only be a teacher, but also a mentor and someone my students can trust,” Widales says. “I try to incorporate as much ‘real life’ examples or scenarios as possible. For instance, I like to start off some lessons in my geometry class with PowerPoint presentations that show geometric figures or ideas in real life. Many students find them interesting and realize that they are learning a lot more.”

Fellow “Life is Loud” campaign actor Jasmine Simmons was cast as a high school student finding her way in a



DRIVEN TO SUCCEED *Jasmine Simmons was a senior at Elgin High School when she appeared in the “Life is Loud” campaign. She is currently a freshman at Tarleton.*

chaotic world of daily struggle. The casting was perfect since Simmons was a high school senior at the time. She is now a nursing student at Tarleton State University. She says the campaign’s focus on science links to her securing a nursing degree in Tarleton’s first nursing degree cohort.

“There is a huge need for more nurses in our society,” Simmons says. “I’ve always been interested in becoming a nurse. My mom was a nurse and I remember her taking me to work with her when I was really young.”

The character in the campaign was tailored to reflect Simmons’ own life. She has had to overcome adversity and find a quiet place to gather her resolve. Her aunt, Colleen Linder, says that’s just the kind of person Jasmine is. “If Jasmine had wanted to drop out of school and fall through the cracks, not many people would have noticed. But she is such a strong person. No one’s pushed her. She’s done all of this on her own.”

While both Simmons and Widales have taken different educational paths, each agrees that Texas must work diligently to bring more and better math and science teachers to its classrooms.

“If we don’t do so, we could cripple the state’s future,” Widales says. “Mathematics and science are the future of the nation.”

The “Life is Loud” campaign, which includes TV and print advertisements and a dedicated website, was filmed at Elgin High School. Students in the commercial were actual students from the high school and were excited to take part in the effort. Some said they felt as if they were filming the sequel to *Stand and Deliver*.

Which is exactly what “Life is Loud” wants to do.

To date, 64 awards totaling \$218,398 have been presented to students from participating universities. 🌟

STEVE HARMON *is director of the Office of Public Relations, Marketing and Information Services at Texas A&M International University.*



TTI State Headquarters and Research Building

State Sen. Steve Ogden, as well as Amadeo Saenz, executive director of the Texas Department of Transportation, and Morris Foster, chairman of The Texas A&M University System Board of Regents, were among the dignitaries celebrating the grand opening of the Texas Transportation Institute’s first state headquarters building March 26 on the Texas A&M University campus. The 66,700-square-foot State Headquarters and Research Building is located next door to the existing Gibb Gilchrest Building in Texas A&M’s Research Park. It houses a number of special features, including a state-of-the-art Visibility Research Laboratory designed to test devices and materials used in pavement markings and traffic signs to help reduce crashes at night. The laboratory is the first of its kind in a university setting, allowing researchers to simulate nighttime driving conditions.

The SHRB has been LEED gold-certified by the U.S. Green Building Council, one of only two Texas A&M buildings to reach that status. The certification means that the TTI state headquarters building was designed and constructed to meet specific guidelines of energy savings, water efficiency, CO₂ emissions reduction, and improved indoor environmental quality.

Established 60 years ago, TTI has become known worldwide for its safety innovations, congestion and mobility studies, and research related to all modes of transportation. Most recently, TTI’s Teens in the Drivers Seat program has made national headlines, pinpointing the most common causes of teenage crashes. This innovative driver awareness program, guided by teens for teens, has been implemented in 350 Texas schools and has expanded to four other states.

Staff Spotlight



DENNIS CHRISTIANSEN, director of the Texas Transportation Institute, recently was awarded honorary membership to the Institute of Transportation Engineers, the highest recognition of professional achievement bestowed by the ITE. Christiansen becomes ITE’s 77th honorary member.

A member of the TTI staff for 36 years, Christiansen has extensive research experience in several areas, including traffic operations and transportation planning, and is an international expert in high occupancy vehicle lanes.



EDUARDO ESPINA, professor of Hispanic studies at Texas A&M University, has received a Guggenheim Fellowship in poetry, which is a first for the university. Espina received a Latin American and Caribbean Guggenheim Fellowship for 2010 in poetry from the John Simon Guggenheim Memorial Foundation. He was one of only two poets chosen from thousands of applicants. Criteria are based on achievement and accomplishment during the applicant’s career, as well as the promise for continued exceptional performance.



JUERGEN HAHN, associate professor in the Artie McFerrin Department of Chemical Engineering at Texas A&M, has been named a recipient of the prestigious 2010 Computing and Systems Technology Outstanding Young Researcher Award, presented by the American Institute of Chemical Engineers. The award, which is bestowed upon only one recipient each year, recognizes an individual under the age of 40 for outstanding contributions to chemical engineering computing and systems technology literature.



JOHN MAYES, director of sports medicine at Prairie View A&M University, has been awarded a Proclamation Certificate of Commendation from the State of Texas by Governor Rick Perry for his efforts in ensuring the success of the National Athletics Trainers’ Association Research Educational Foundation. Mayes has played a vital part in advancing the NATA’s Research & Education Foundation over the past year as he established the John A. Mayes Scholarship Endowment, which will provide financial resources for educational research opportunities in the field of sports medicine for ethnic minority students.



WANDA MERCER, vice president of student affairs at Tarleton State University, has received the Pillar of Profession Award from the NASPA Foundation at the organization’s annual conference in Chicago. The peer-nominated national award serves to recognize her many years of outstanding work in the student affairs profession including numerous accomplishments that helped further the Texas Association of College and University Student Personnel Administrators and NASPA Region III.



ANNE SWEENEY, a professor at the Texas A&M Health Science Center School of Rural Public Health, has been appointed to a review panel to advise the Environmental Protection Agency on health risks from dioxin and related compounds. Sweeney also is currently serving on a review panel advising the EPA on national air quality standards for carbon monoxide.



JACQUELINE THOMAS, Regents Professor of French and director of the Center for Teaching Effectiveness at Texas A&M University-Kingsville, was recently honored with the Ordre des Palmes Academiques, a French order of chivalry for academics and educators originally established by French emperor Napoleon at the turn of the 19th century. The Cultural Service of the Consulate General of France in Houston presents approximately two candidates for the award each year.



ROBERT VOKURKA, chair of the Department of Finance, Economics and Decision Sciences at Texas A&M University-Corpus Christi, has been appointed to the 2010 board of directors for the Malcolm Baldrige National Quality Award by Patrick Gallagher, director of the Commerce Department’s National Institute of Standards and Technology. The award, created by public law in 1987, is the highest level of national recognition for performance excellence that a U.S. organization can receive.

Galaxy Hunter

Continued from Page 1

“On Earth, we only see such a small fraction of the realm that’s physically possible with astronomy,” Papovich muses. “I think that’s what has always excited me — just the weirdness out there. The beautiful and the weird.”

That and the itch to answer the one question that everyone asks him at some point: How did it all begin?

There’s no denying that Papovich has made significant strides to find the answer in a relatively short career marked by major achievements. Earlier this year, he laid claim to his



Photo courtesy of NASA/JPL-Caltech/C. Papovich.

EXCITING DISCOVERY *Papovich and his team detected what may be the earliest and most distant cluster of about 60 galaxies, believed to be about 10 billion years old.*

Energizing Texas

Continued from Page 1

Maldonado brings solid credentials in engineering research and administration to EEI. She was Texas A&M’s executive associate vice president for research and interim vice president for research when she was approached by G. Kemble Bennett, vice chancellor for engineering, to lead EEI. Previously, she was associate dean for research of engineering, deputy director of TEES, and a professor in the Department of Electrical and Computer Engineering.

“What’s exciting about the EEI is that since it was formed a little over half a year ago, it is pulling together tremendous resources that exist in the system in many areas of energy,” says Maldonado, who splits her time between offices at A&M System headquarters and at the TEES State Headquarters Building. “I get called by all kinds of companies — oil and gas, nuclear energy, wind, energy efficiency — and by entrepreneurs who might want to license technologies from the A&M System.”



Since last spring, Maldonado has been assembling experts and coordinating research initiatives for the A&M System’s response to the Gulf oil spill caused by the explosion at the Deepwater Horizon rig. She also is planning an Energy Day conference of top university researchers and energy industry representatives at Texas A&M in early 2011. Recently, she has solidified an important long-term research partnership with Vestas Wind Systems, a global wind company based in Denmark. And when the Spanish multi-national Gamesa Technology Corp. sought a partner to bring its massive new G10X 4.5-megawatt wind turbine to the U.S. for testing, Maldonado helped lead the giant energy company to Texas.

Maldonado believes oil and gas will remain in the energy field for a long time, as will coal. Meanwhile, wind and bioenergy sources are gaining increasing attention. According to Maldonado, one of the biggest challenges ahead for energy planning is ensuring that everything will work together.

The A&M System’s resources provide a working example. Through EEI, she says, collaborations can be forged with facilities ranging from the Alternative Energy Institute at West Texas A&M University, where researchers have been studying wind power for three decades, to TEES’ Offshore Technology Research Center in College Station, the only wave basin of its size and sophistication at a U.S. university.

“There’s a big discussion on how to integrate the renewable sources of energy with traditional sources for electricity and fuel,” Maldonado says. “For example, I think we should be looking at nuclear as one of our key solutions to the energy situation. But there’s a perception that nuclear is not safe. So there’s a human element that you have to manage.”

About one-third of the energy research budget should be invested in public awareness, she says, to stress not only energy production, but, equally important, energy efficiencies and energy conservation.

As EEI evolves, Maldonado says it will become as much facilitator as anything else, embracing resources, ideas and possibilities. 🌿

GENE CHARLETON, a senior science writer for Texas A&M Engineering Communications, contributed to this article.

biggest accomplishment yet. Using images from NASA’s Spitzer space telescope, he and his team detected what may be the earliest and most distant cluster of galaxies ever found. The group of roughly 60 galaxies, called CLG J02182-05102, is nearly 10 billion years old — born just four billion years after the Big Bang.

While the sheer thought of looking at a pure image of something so ancient is mind-boggling enough, what stunned Papovich and his team was the surprisingly modern appearance of CLG J02182-05102 — a huge, red collection of galaxies that contains almost 10 times as many stars as our Milky Way.

“It’s like we dug an archeological site in Rome and found pieces of modern Rome amongst the ruins,” says Papovich, putting it in perspective.

Just as an archeologist’s excavation must continue when an amazing artifact is found, so will Papovich’s exploration of the sky, fueled by a desire to find more clues and to keep looking further and further into space — back toward the very beginning of the Big Bang. He currently is involved with Texas A&M postdoctoral researcher Dr. Steve Finkelstein on another large project to analyze the deepest images of space taken yet by the Hubble space telescope in an effort find more clues to the formation of galaxies.

“You look at the Milky Way and its stars; well, stars form galaxies,” Papovich explains. “We want to know when those stars formed and when they assembled into a galaxy. Did stars form as small bits that formed into

System Rallies for Gulf

Continued from Page 1

Study of the spill had also begun immediately at Texas A&M University-Corpus Christi’s Harte Research Institute for Gulf of Mexico Studies. “Our concern is, is this a tipping point? Is it something that will take these other issues and move them to a point where the entire ecosystem will shift and change to something less productive, less valuable than we have now? ” said Larry McKinney, executive director of the Institute.

McKinney and Institute colleague Paul Montagna, endowed chair for ecosystems studies and modeling, explained that much of the damage caused by the spill was taking shape out of sight. “Beneath the sea surface is a toxic soup of oil, methane and dispersants, which is also killing many sensitive parts of the ecosystem. Because this disaster is unfolding beneath the surface, it is occurring out of sight. Its effects are likely more devastating to the Gulf of Mexico and the sustainability of the Gulf economy than those we have already seen. These effects have been occurring since the beginning of the blowout, long before oil arrived on the shore.”

Rainer Amon, associate professor of marine sciences at Texas A&M University at Galveston, joined Texas A&M’s John Kessler, assistant professor in the Department of Oceanography, on a 10-day expedition to study methane leaking in the Gulf. According to Amon, methane could cause the spread of dead zones—portions of the ocean lacking oxygen: “If you have a lot of oxygen consumption by organisms but not additional oxygen, the oxygen will be depleted over a certain amount of time, and that will lead to the death of a lot of organisms that live at the bottom.”

For Kessler, who was awarded a \$160,000 grant from the National Science Foundation to examine methane gas in the spill zone, the question is, “How long is that methane and natural gas going to be there? If it is slowly consumed by microorganisms, what’s that going to do to the amount of dissolved oxygen in the water?”

An array of system researchers continues active involvement in the spill and its aftermath. Texas A&M’s strong presence in the effort includes Piers Chapman, head of oceanography; Mahlon Kennicutt, marine scientist; Steven



CAREFUL TESTING *Texas A&M graduate student Lei Hu samples water near the Deepwater Horizon rig.*

larger bits like the Milky Way, or did the Milky Way form and then a lot of stars formed?”

For Papovich, who describes his very first time observing as “almost life-changing,” what began as years of postdoctoral research at the University of Arizona and evolved into countless precious observational hours spent examining the formation of early galaxies with the Spitzer space telescope has combined to make astronomy more than a job or even a hobby. Simply put, each revelation or discovery he encounters holds a significant meaning.

“You’re taking data no one has ever seen. It’s all new, and it’s your responsibility to analyze it,” Papovich says. “It begins to feel like it belongs to you, you’ve put so much effort into it.”

At Texas A&M, Papovich feels he’s found his niche among the many astronomers and postdoctoral researchers who share his interest in the sky.

“The Mitchell Institute is phenomenal, and there’s been a tremendous acceleration of growth,” Papovich says. “If you’re lucky, the chance to be a part of something like this only happens once in your career. I think morale is very high, and we are very excited about the prospects to come. Personally, I’d just like to know I really made a contribution to the basic questions of where we came from.”

Until then, Papovich will continue studying those galaxies “far, far away.” 🌿

CHRIS JARVIS is a communications specialist with the College of Science at Texas A&M University.



MAPPING THE DAMAGE *This NOAA map shows the location and extent of the Deepwater Horizon oil spill in late summer.*

DiMarco, oceanographer; Norman Guinasso, director of the Geochemical and Environmental Research Group; David Burnett, director of technology at the Department of Petroleum Engineering; John Nielsen-Gammon, Texas state climatologist and a professor of atmospheric science; Robert Randall, professor of coastal and ocean engineering; and Don Conlee, atmospheric science researcher.

Also involved are A&M-Corpus Christi experts Tom Shirley, professor of life sciences; Wes Tunnell, associate director of the Harte Institute; and Greg Stunz, marine biologist.

In July, Gov. Rick Perry announced the formation of the Gulf Project, a statewide effort to protect Texas from environmental and economic disasters. “The Gulf Project is an unprecedented collaboration of the state’s top scientists, engineers and researchers, focused on protecting our residents, environment and economy, and solving the unique challenges presented by the next generation of domestic energy exploration and production,” Perry said. “To keep our status as the energy capital of the nation and preserve our environment, jobs and economy, Texas must become the world leader in developing the next generation in offshore oil exploration safety and response.”

The Texas A&M System will play a key role in that mission. “The global resources of the system are an asset to the United States, and we stand ready to help in the Gulf in any way possible,” said Michael D. McKinney, chancellor. “Experts and equipment from our campuses, especially those in Corpus Christi, College Station and Galveston, have been deployed since the crisis began. We will stay involved as long as we are needed.” 🌿

See the A&M System’s response to the Gulf oil spill in an episode of the “Dimensions” web series: www.tamus.edu/video/dimensions/gulf

Texas A&M Health Science Center’s New Bryan Campus Joins Biomedical Corridor



Nestled among 200 acres of forest along Texas State Highway 47, it is sometimes called a “healing place.” Others liken it to a “campus in the forest.” By any name, the new Bryan campus of the Texas A&M Health Science Center is a winner, as attested by more than 600 dignitaries and guests who braved the heat on July 22 for commemoration ceremonies.

“Having presided over unprecedented growth in programs and student numbers, it is enjoyable to dedicate this campus and the state-of-the-art facilities it represents,” said Nancy W. Dickey, M.D., HSC president and vice chancellor for health affairs for The Texas A&M University System. “This meets the state’s needs with a commitment to partnering and sharing to maximize every dollar spent.”

Taking in the tour of the new campus were Texas legislators, university presidents and members of the A&M System Board of Regents. Joined by Bryan/College



Station officials, community leaders and campus partners, the group got a firsthand look at the emerging shape of health education and health care for generations of Texans.

Regents approved the allocation of acreage to the HSC in December 2006, having previously accepted the land gift from the City of Bryan. Fifty of these acres are for health-related public-private partnerships and facilities while the remaining acreage is for academic facilities.

The first two buildings are the Health Professions Education Building (HPEB), now open, and the Medical Research and Education Building (MREB), scheduled for occupancy in the spring.

The HPEB features a simulation center; numerous clinical, videoconference, training and meeting rooms; administrative space for the HSC-College of Medicine and HSC-College of Nursing; and outdoor courtyards. The MREB has an imaging lab, seminar rooms, and

offices, laboratories and support spaces for the HSC-College of Medicine.

The campus’s first clinical building will open in summer 2011 and also will serve as home for a Mary Crowley Cancer Research Center, the Texas Brain and Spine Institute, Blinn College allied health programs, a St. Joseph Health System imaging center, and the HSC-College of Medicine and HSC-Rural and Community Health Institute.

Joining these buildings on 21 acres of the Bryan campus will be Project GreenVax, a biotherapeutic manufacturing initiative for a landmark new technology that could dramatically increase the nation’s capability to produce vaccines for infectious diseases, including influenza.

The total economic impact of the Bryan campus is projected to be \$1.2 billion by 2015. 🌸

CATHY CASHIO is director of marketing and communications for the Texas A&M Health Science Center and SCOTT MAIER is a senior communications specialist.

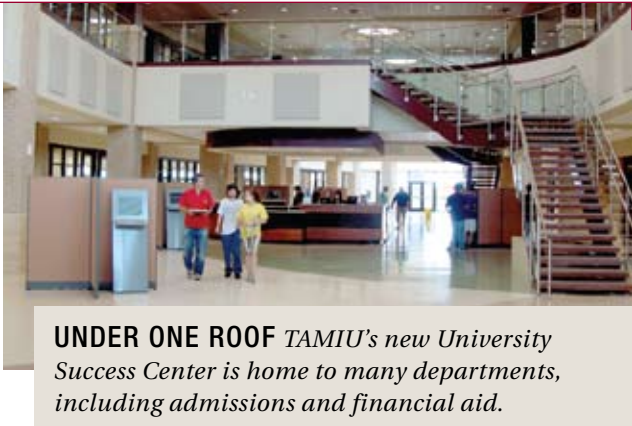
One-stop Shops at A&M-Commerce and TAMIU Ease College Transition Process

When students returned to the Texas A&M University-Commerce campus last fall, they didn’t have to hunt down the registrar’s office in the Business Administration Building. They didn’t have to ask for directions to visit a financial aid adviser or a career counselor across campus. Instead, they went to what once was the university’s print shop, now totally refurbished and specifically designed to help students and parents more easily enter the university world—the new Student Access and Success Center.

“We have everything in one place now: financial aid and scholarships, the registrar’s office, enrollment management, Hispanic outreach, veterans’ affairs, and our summer camps and conferences coordination,” says Mary Hendrix, vice president for student access and success.

The center, completed in five months for less than \$1 million, also accommodates recruiters, testing services, and career counseling and development. Admissions benefits from the center as well, which allows students and their families to access multiple services conveniently located in one facility.

“Having our department in the Student Access and Success Center allows us to properly direct students and their families through the enrollment steps,” says Stephanie Holley, dean of the enrollment and retention division. “We eliminate confusion and runaround when we don’t have to



UNDER ONE ROOF TAMIU’s new University Success Center is home to many departments, including admissions and financial aid.

send a student back and forth across campus to access the information they need.”

A similar center has been created at Texas A&M International University in Laredo, evidence that these types of user-friendly student centers are increasing in popularity and effectiveness. TAMIU, which is expanding rapidly, didn’t have available space to convert into a student success center. Instead, it installed the program in a new \$25-million building that also houses a variety of university departments such as admissions, financial aid, student counseling services and even the university bookstore.

A key part of the new A&M-Commerce building is the University College, an academic program that helps students forge a connection with the university from the beginning of their college experience. Currently, University College averages about 30 visits per day from first-time freshmen with less than 24 credit hours. It also helps those who need to take entry-level English and math. “Success coaches” are cross-trained in admissions and financial aid and are able to assist with enrollment, scheduling and degree-plan development.

“Students come to us for advice about their schedule, or sometimes just to talk,” says Dr. Ricky Dobbs, University College dean. “They’re more likely to stay at A&M-Commerce if they have a connection and know someone really cares about them. That’s why this university has a reputation for being a place where students from all backgrounds, regardless of means, can get a leg up and make a start in the world.” 🌸

BRENT LYDAY is a publications writer at Texas A&M University-Commerce.



MAKING LIFE EASIER A&M-Commerce’s Student Access and Success staff work from the same facility, making it easier for students and their parents to navigate the admissions process.

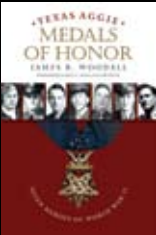
Texas A&M Press Top 5 Books



Going to Windward: A Mosbacher Family Memoir
BY ROBERT A. MOSBACHER SR. WITH JAMES G. MCGRATH
(FOREWORD BY GEORGE H. W. BUSH)
In a lifetime filled with success, failure and tragic personal loss, the former U.S. Secretary of Commerce during George Bush’s administration, Robert A. Mosbacher Sr.’s story is one of navigating in calm seas and high winds alike.



George P. Mitchell and the Idea of Sustainability
BY JURGEN SCHMANDT
Jurgen Schmandt traces both the idea of sustainability and tycoon, real estate developer and philanthropist George P. Mitchell’s commitment to the idea since the early 1960s.



Texas Aggie Medals of Honor: Seven Heroes of World War II
BY JAMES R. WOODALL
(FOREWORD BY JAMES HOLLINGSWORTH)
James Woodall illustrates the terror, heartbreak and bravery of seven valiant Aggie soldiers who received the Medal of Honor in World War II.



Cheryl Hazeltine's Central Texas Gardener
BY CHERYL HAZELTINE
First published in 1980, this updated edition includes numerous lists, recipes and recommendations for trees, shrubs, vines, flowers, vegetables, and fruits, with additional information on popular topics such as organic gardening methods for gardeners in central Texas.



The Texas Legacy Project, Stories of Courage and Conservation
EDITED BY DAVID TODD AND DAVID WEISMAN
(FOREWORD BY CARTER SMITH)
The stories of more than 60 Texans, each representing various causes, communities and walks of life, are represented in this project launched by the Conservation History Association of Texas in 1998. The book is a companion to the interactive website www.texaslegacy.org



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SYSTEM ON THE WEB

Dimensions

Sights and Sounds from the Texas A&M System

“Dimensions,” the video series produced by The Texas A&M University System, continues its journey of discovery across the breadth of the system’s 11 universities, seven state agencies and health science center. So far in 2010 we’ve had in-depth reports ranging from an equine therapy program at Tarleton State University to a transformative makeover of the campus at Texas A&M-University-Texarkana.

There have been stops along the way in Prairie View, Kingsville, Galveston, Corpus Christi, and College Station. A special report featured the system’s response to the Gulf oil spill.



Guided by Rubén Olague of the system’s communications office, the series brings to life a sample of the thousands of tales of achievement and innovation found on our campuses and agencies 24/7/365. At Tarleton, “Dimensions” showed how the TREAT program uses horses to help children and adults with disabilities. At the Texas Medical Center in Houston, the series showcased a new Ph.D. program for nurses at Prairie View A&M University, and at Texas A&M University-Kingsville, “Dimensions” viewers got an extremely up-close look at how rattlesnakes and their kin are caught so that their venom can be studied for medical uses at the National Natural Toxins Research Center.

Stay tuned this fall for more reports as “Dimensions” brings you the people and ideas from the A&M System that are shaping Texas and the future. You’ll find a complete selection of “Dimensions” on the system homepage: www.tamus.edu.



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THE TEXAS A&M UNIVERSITY SYSTEM
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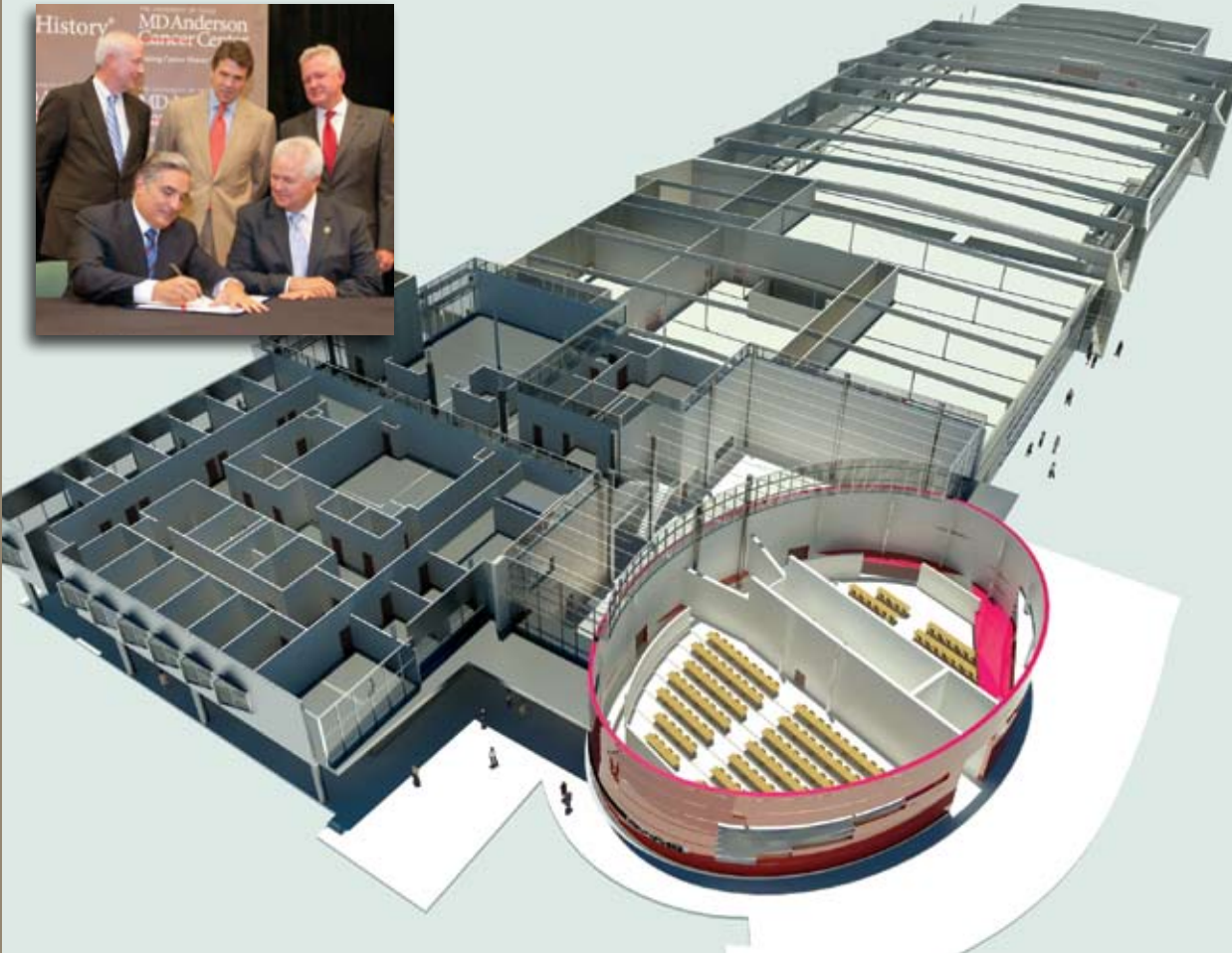
Manufacturing the Future

With construction of its headquarters fully underway and scheduled for completion in December 2011, the National Center for Therapeutics Manufacturing already is bursting at the seams with game-changing projects that will redefine Texas-based research from vaccine manufacturing to potential cures for cancer.

Last February, the NCTM’s research expertise and specially developed clean-room pods formed the basis for Project GreenVax, a major biotherapeutic manufacturing initiative. Primarily funded by the Defense Advanced Research Projects Agency, Project GreenVax is a creation of the Texas Plant-Expressed Vaccine Consortium, comprised of The Texas A&M University System and G-Con, LLC. The project uses tobacco plants, rather than the current egg-based technology, to fast-track the development of vaccine production, allowing rapid response to infectious diseases such as influenza or potential threats from bio-terrorism.

In May, the NCTM joined a partnership with The University of Texas MD Anderson Cancer Center to develop faster and better ways to advance cancer research from clinical trial to manufacturing. In announcing the inter-system collaboration, Gov. Rick Perry said the NCTM “is already enhancing our state’s growing stature in the world of biotechnology, moving us closer to our goal of Texas being the place where researchers can conceive, develop, test and enter full production on new medicines without ever leaving the state.”

The NCTM, an institute of the Texas Engineering Experiment Station, was created in 2009.



ABOVE AND LEFT: Architect’s illustration of the NCTM; construction on the Texas A&M campus. **Inset:** (front row, from left) Francisco Cigarroa, chancellor of The University of Texas System and Michael D. McKinney, chancellor of The Texas A&M University System. Back row: Raymond Dubois, provost and executive vice president at MD Anderson; Gov. Rick Perry; and Brett Giroir, vice chancellor for research for the A&M System. (Photo by Kim Christensen)