

SPIRIT

The Triple Crown

Texas A&M reflects on 30 years of serving the public as a land-, sea- and space-grant institution.



Celebrating Our Campus Community



When you start throwing numbers out there, the size of Texas A&M University can be overwhelming: 19 colleges and more than 5,200 acres; more than 69,000 students across 128 undergraduate degree programs and 300 graduate programs; and approximately 1,100 student organizations.

Step back and think for a moment about what it takes to keep an institution of this size running on a daily basis. It's no small task. At the heart of our university, there are thousands of administrators, faculty and staff who work behind-the-scenes, all drawn to their positions by a common vision: the success of our students. They play an important role in shaping the Aggie experience and, in many ways, heavily influence students' intellectual, social, personal, emotional and even ethical development.

These individuals invest their time and talent every day so that Texas A&M can fulfill its mission and maintain its reputation as a world-class institution. They include everyone from the professors and lecturers at the front of the classroom, to advisers who oversee class schedules and student groups, to the campus landscapers and dining and custodial staff. They are important advocates, actively promoting Texas A&M's values and culture, supporting its mission and making our university a force for good in the world.

It's no surprise that many of those who work for Texas A&M are invested personally and financially in the university's future.

In fact, more than 8,000 current, former and retired Texas A&M faculty and staff have given more than \$62.5 million to the *Lead by Example* campaign, a \$4 billion fundraising effort for the university that stands at \$3.57 billion raised as of June 30.

Faculty, staff, administrators and students are an integral part of the culture of philanthropy here on campus. That is why, this fall, we will announce a campus giving campaign, emphasizing engagement and participation over dollars raised. It will allow the campus community to participate in the *Lead by Example* campaign goal and support areas of the university that reflect their personal values and interests.

Throughout the campaign, we will share stories of faculty, staff and student groups who are giving back through service and financial contributions. In this issue's campaign update on page 50, we've featured six outstanding faculty and staff members who have already made gifts to Aggieland. While their gifts reflect their different passions, they share one purpose in charting the future course of our university. Their stories inspire me because of the level of investment, passion and selfless service they show for Texas A&M. They all feel strongly about giving back, but the truth is, this university wouldn't function without them and the thousands of others on the front lines every day.

To all of our faculty, staff and administrators—current, former and retired—thanks for all you do.

A handwritten signature in black ink, appearing to read 'Tyson Voelkel '96'. The signature is stylized and fluid.

Tyson Voelkel '96

PRESIDENT, TEXAS A&M FOUNDATION

ISSUE



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Read *Spirit* online at spirit.txamfoundation.com.

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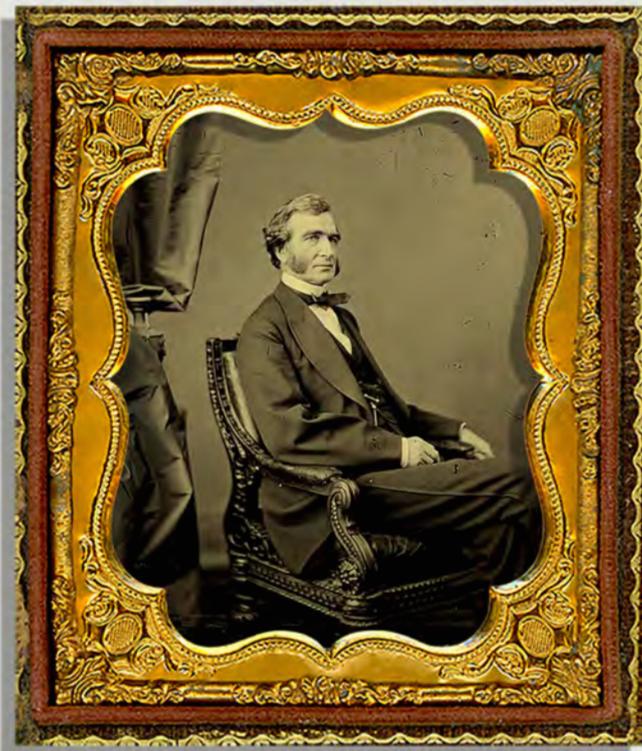
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Thank You, Justin Morrill



We Aggies owe a lot to a man I would wager most of us had never heard of: Justin Smith Morrill. While he didn't attend school past the age of 15, he fundamentally changed the shape of higher education. The successful businessman, who eventually became a Vermont Congressman and helped found the Republican Party, was the brain behind the Morrill Land-Grant Acts.

The first of the two acts, signed into law by President Abraham Lincoln on July 2, 1862, was the impetus behind creating 69 of the nation's land-grant institutions, including Texas A&M University. The act allowed for the creation of public colleges in the U.S. using the proceeds of federal land sales; education at these new institutions focused on agriculture, mechanical arts and military training.

Morrill's motivation was to provide expanded educational opportunities for a young and growing nation, particularly to mem-

bers of the working class. He could not have known then the impact of his actions, but the Morrill Act changed the face of higher education in two significant ways: It was the first time the federal government became directly involved in supporting higher education, which set a precedent for continued government aid. Second, it effectively made higher education available to the general public for the first time. And whereas the focus of learning at the post-secondary level had previously concentrated on the classical arts, land-grant schools taught students the practical skills they needed in the working world.

More than 150 years later, the Morrill Act has proven to be an influential piece of legislation. It gave Texas A&M its land-grant legacy, and even today, the 'A' and 'M' remain in our university's name as a symbolic homage to our land-grant roots.

More importantly, the land-grant designation laid the foundation for Texas A&M to become one of the first land-, sea- and space-grant universities by 1989—a distinction it shares today with only 16 other schools nationwide. This year, on the 30th anniversary of this achievement, we dedicated this issue's cover feature (page 18) to highlighting 12 ways Texas A&M programs and researchers are fulfilling the university's land-, sea- and space-grant missions. We hope it gives you a diverse look at some of the ways Aggies are exploring new frontiers, conducting public outreach and serving the national good.

As you read, give a quick "Thanks and Gig 'em" to Justin Morrill—the gentleman who helped us, and so many other universities, begin a legacy.

Dunae Reader

Dunae Reader '15

EDITOR, SPIRIT MAGAZINE

letters

Share Your Comments: We always enjoy receiving our readers' reactions to Spirit. If the magazine's content moves you to write, please email us at info@txamfoundation.com or send a note.

DUNAE READER '15
Editor

"Psycho" is considered one of Alfred Hitchcock's finest films and praised as a major work of cinematic art by international film critics and scholars. The shower sequence is the film's pivotal scene and one of the best-known in all of cinema.

Perfect Timing

During the summer of 1979, I saw the movie "Psycho" with friends at the Grove. When Janet Leigh was being stabbed in the shower, I was screaming (as were many others), but the train came through at that exact moment, and its whistle was blowing so loudly that all of our screams blended with the train. It was a fun memory that my friends and I will never forget!

—THERESA MAZUCH PHINNEY '81
College Station, Texas

sunbathing. There were usually 20 or 30 people at the Wofford Cain outdoor pool, including some of the College Station locals. There was plenty of space for setting up a small encampment on the grass until the sun began to set.

After dinner, depending on the night of the week, it was movie time at the Grove. I remember little about the quality of the screen or the projection system; I'm sure it was primitive by almost any standard. But we saw everything just fine, and the outdoor setting was special even for those times.



A Most Memorable Summer

During the summer of 1972, I was completing my freshman year by attending summer school. While I was reluctant to stay on campus, it turned out to be one of the most memorable summers of my life, thanks in part to the Grove.

Mornings were spent in class. But after lunch, it was down to the pool, books in hand, for an afternoon of swimming and

I don't remember many of the titles, but they were usually older films like "National Velvet." One evening, there was a screening of "We've Never Been Licked." There was lots of audience participation, as we laughed at the scenes of the Corps and the hokey patriotic sentimentality. The Vietnam War was raging, and it all seemed more than a little anachronistic.

I am happy to know the Grove is remembered and that there are plans for a

"We've Never Been Licked" was a World War II propaganda film released by Universal Pictures in 1943. Portions of the movie were shot on location at the Texas A&M University campus.

kind of resurrection of sorts. Texas A&M was a very different place in the summer of 1972, and it will never be that intimate again. But our memories of the Grove make us smile even as the campus continues to evolve. Perhaps the Grove at The Gardens will mean just as much to present and future generations of Aggies.

—THOMAS DRURY '75
Boerne, Texas

What's That Smell?

In the 1970s, I was staying in Dunn Hall for summer school. We would walk to the Grove to watch movies at night. Often a train would come by at key moments in the movie, and it wasn't unusual for the wonderful aroma from the old swine center to drift our way when the breeze was just right. I have very fond memories of those movies at the Grove!

—ROBERT HEATH '77
College Station, Texas

Shenanigans at the Grove

I went to many movies and theater events at the Grove during the 1940s and 1950s. It was always hot and humid! Mr. Puddy, who ran the Guion Hall movie theater, now Rudder Tower, was not a fan of the Grove because it cut into the movie theater business. He eventually resigned himself to that and managed the movies at the Grove.

A gentleman, now passed away, would sometimes spread a little fulminate of mercury on the stage during the day. During the movie at night, when the humidity got high enough and the temperature cooled down, the moisture caused the fulminate to go off with a very bright light and a small explosion. He never got caught! Lots of tricks went on during those days that would not be tolerated today!

—HUGH LINDSAY '64
College Station, Texas

Music Nights

I remember the Grove! As part of MSC-Basement, we brought smaller bands, usually from Houston or Austin, to play there. It was a great venue and very convenient, being on campus. I had no idea that I was on the same stage that Bear Bryant and Bob Hope had been on. I'm excited that the Grove will be rebuilt on West Campus. I can't wait to see it!

—BRIAN MANN '85
Spring, Texas



digitaldialogue

I worked at the Grove from 1965 to 1967. I remember the smell of the popcorn as well as the snow cones. I saw "We've Never Been Licked," a 1943 World War II film that was partly shot on the Texas A&M campus, more times than I care to count!

—ROBERT "BOB" HUX '66
Houston, Texas

I was happy to see the aggieTEACH program featured in the spring issue of Spirit. I had the pleasure of having Mary Kate Wilkin '19 as a student in freshman chemistry. She will be an amazing teacher!

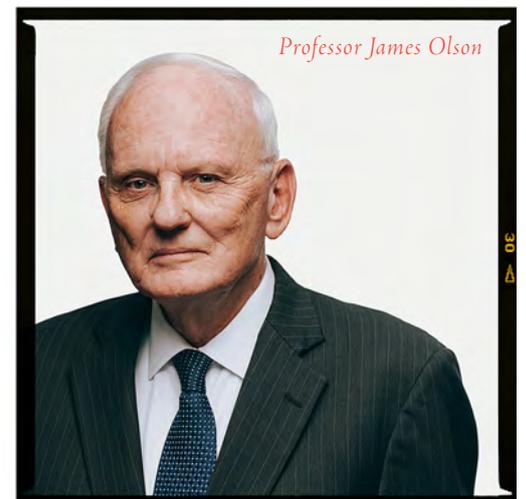
—DR. SIMON NORTH
College Station, Texas

Cybersecurity is top-of-mind for the business owners I speak with every day, so I appreciated seeing an article on the topic in the spring edition. No doubt, the Aggies coming out of these programs are the future in addressing these issues.

—WHITNEY BRADY '04
Katy, Texas

I took James Olson's class at Texas A&M in 1999. Fascinating! The Bush School is lucky to have him.

—SARAH LANDRETH BOLTON '99
Hattiesburg, Mississippi





Living Wall Displays Plants

Merging by-product sheet metal from the automotive industry and drought-tolerant plants, Texas A&M University students and architecture professors Ahmed Ali and Bruce Dvorak designed and built a “living wall” on the south side of Langford Architecture Center’s building B. The wall design offers an innovative approach on the “green wall,” a type of vertical gardening system that is popular in buildings across Europe.

Crafted from galvanized sheet metal, the wall reduces heat consumption while demonstrating a sustainable, long-lasting and economical design. “This is the first living green wall made from sheet metal scrap generated from the automotive industry,” Ali said. “Students cut metal using a com-

A new “living wall” made of galvanized sheet metal adorns the south side of Langford Architecture Center’s building B, adding beautification while reducing heat effects on the wall and surrounding area.

puter-controlled water jet, built wall system units and assembled them with aluminum rivets, increasing their knowledge of unconventional design materials.”

In the semesters leading up to construction, students researched patterns to determine which would best reflect sunlight before designing diamond-shaped planters. Dvorak chose hardy plants that would resist heat, drought and wind to grow in the wall’s vertical insulated pockets.

Funded by a grant from Texas A&M and General Motors Co., the project encouraged architecture and landscape architecture students to work across disciplines and promote sustainable development.

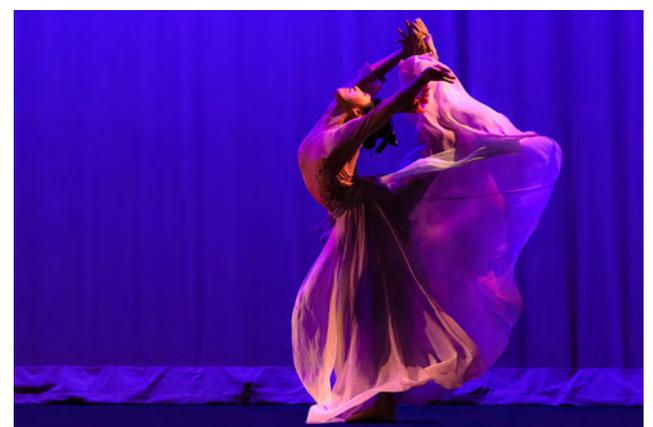
Calling All Cultures

This spring, students traveled the world in seven days without ever leaving campus during the Texas A&M International Student Association’s annual International Week, or “I-Week.” There were seven international-themed events centered around the food, dance, dress and history of diverse cultures.

International Student Association President Fatima Wood ‘19 emphasized the opportunity the event provided to promote understanding and cel-

ebration of different cultures among students. She especially praised I-Dinner, a culinary exhibition showcasing signature dishes from different countries. “Food and cooking are such integral parts of the formation of cultural identities,” Wood said, “and eating is something that everyone does, so what better way to bring people together?”

Other I-Week events included a student soccer tournament with teams represent-



ing different countries; a temporary henna tattoo station in Rudder Plaza; exhibits that displayed the rich history and traditions of countries; and a show

in which students wore traditional costumes from different cultures and showcased their talent through performances, such as singing and dancing.

Throughout the week, donations were also collected for 12th Can, the Texas A&M student-run food pantry.



Military Medicine Program



The Texas A&M College of Medicine is partnering with the Corps of Cadets to create quality military physicians through a new initiative called the Cadet to Medicine Early Assurance Program. This program will grant early admittance to Texas A&M's medical school to high-performing cadets who demonstrate an interest in military medicine.

Each admissions cycle, up to five undergraduate members of the Corps who qualify and have a minimum 3.5 GPA will be conditionally admitted to the program during their junior year. Once accepted, cadets will receive free MCAT preparation, attend a

seminar and shadow experienced practicing physicians.

"We are happy to continue honoring Texas A&M's military legacy through this pipeline program with the College of Medicine," said Brig. Gen. Joe Ramirez '79, Commandant of the Corps. "It is another opportunity for our cadets to showcase their talents, leadership and dedication to service through a targeted military medicine program that will serve to produce more military physicians for our nation."

StoryCorps archived Aggie stories as part of its national oral history project.

What's the best way to spend summer break?

"Seeing new places and taking road trips with my friends!"

Matthew Tate '20
CIVIL ENGINEERING

"Surrounded by family. It's the perfect time to relax, recover and enjoy a homemade meal."

Ryan Ramirez '21
ELECTRICAL ENGINEERING

"Learning something new! Whether it's a new job, a new language or building a new friendship, summer break is a great time to learn outside of academics."

Emelie Gulde '22
BUSINESS ADMINISTRATION

StoryCorps Records Aggies

Last spring, StoryCorps gathered the inspirational stories of more than 40 Aggies as part of its national oral history project. StoryCorps is a nonprofit that began in 2003 with a mission to archive the personal stories of our time and create a culture of listening. Since then, stories from all 50 states and locations worldwide have been compiled to create the largest single collection of human voices ever recorded. The stories are preserved in the Library of Congress Archives and shared with listeners across numerous platforms, including National Public Radio's "Morning Edition."

The organization's stop in Aggieland brought moving tales from students, former students, Yell Leaders, professors, and even President Michael K. Young and Chancellor John Sharp '72. Not every story is easy to listen to, as some Aggies describe difficult events. Other stories bring forward the beauty of Texas A&M and its dedicated faculty and staff. Although the storytellers are individually unique, their tales are tied together by the Aggie Spirit and themed by the university's core values. To listen to Aggieland's stories, visit tamu.edu/storycorps.



A new historical marker outside of the Academic Building commemorates Aggies' participation in World War I. Students and staff volunteered for the war effort in large numbers, while the college also served as a military training base for more than 4,000 men in the U.S. Army who specialized in radio mechanics, auto mechanics and meteorology.

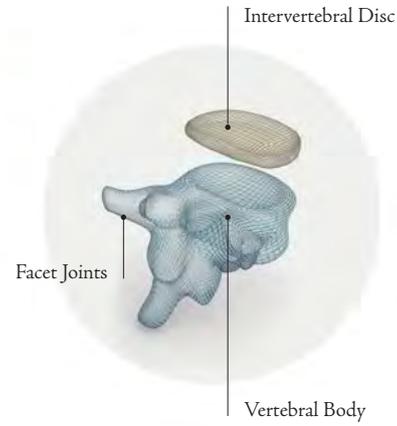


Construction on a new 546,000-square-foot parking garage on the north side of campus began in March. Dubbed the Polo Garage Project, it is set to debut in 2020 and will include a recreation center, office space and food court.



On your next visit to Aggieland, **don't miss the new road strips on the westbound and eastbound lanes of George Bush Drive near Penberthy Boulevard.** When cars drive over the bumps, drivers can hear and feel the opening beats to the Aggie War Hymn: "Hullabaloo, Caneck, Caneck." To best hear the rhythm, trucks should drive in the right lane and cars in the left lane, going 40 mph.





The joints in the spine are called facet joints. Facet joints are hinge-like, linking vertebrae together and allowing motion. Each vertebra has two sets of facet joints—one pair facing upward and one downward. The intervertebral discs are composed of a central gelatinous material that permits cushioning and movement between the joints. The joint surfaces are also coated with cartilage, allowing fluid movement against each other.

Spinal Solutions

A team of researchers at Texas A&M University became the first to use dynamic X-ray technology to successfully map the lumbar spine. The project, led by Dr. Xudong Zhang, seeks to investigate lower spine-related disorders. The computerized visuals produced in the study will provide a stepping stone for further re-

search on the treatment of lower back pain and other spinal injuries.

In contrast to the static X-ray images that allow doctors to diagnose broken bones, Zhang's team used multiple X-ray sources and high-speed cameras to track and record bones in motion. The recorded sequences were then converted into pinpoint-

accurate, fully interactive 3D models.

Zhang explained that these models can be used to conduct research previously impossible with human subjects. "We can only ask our human subjects to perform safe tasks. We can't ask them to push limits," he said. "But once we build the subject-specific computer models, we

can virtually push their limits and create simulated injury scenarios."

Conclusions drawn from such research could create promising new treatment options for spinal injuries and disorders, such as exoskeleton devices and new surgical approaches.

simple science



What makes your funny bone hurt?

Surprisingly, the funny bone isn't really a bone at all. It's actually a cluster of nerves called the ulnar nerve—a bundle of sensitive fibers that run behind your elbow joint. The ulnar nerve starts in the spine and offshoots through the shoulder and down the arm, ending in both the pinky finger and ring finger. It then follows a delicate pathway that is unprotected as it passes behind the knob of the elbow.

"The ulnar nerve is wedged between the bone and the skin near the elbow joint with little to no cushion or protection," said Cody Bruce, clinical assistant professor in the College of Nursing. "When your elbow is extended, this area is protected; but if the elbow is bent, it opens up this sensitive area. When you hit that groove, you're actually pinching the nerve, which is why you experience moderate discomfort and a tingling feeling down the arm."



Spearheading a Discovery

In a joint venture with colleagues from Baylor University and The University of Texas at Austin, Texas A&M University researchers discovered what are believed to be the oldest weapons ever found in North America: ancient spear points that are 15,500 years old. The findings raise new questions about the settlement of early peoples on the continent.

The 3 to 4-inch-long spear points were dug up at the Debra L. Friedkin site, named for the family who owns the Central Texas land. The tools pre-date the Clovis culture, who for decades were believed to be the oldest ancestors of indigenous Americans.



“The discovery is significant because almost all pre-Clovis sites have stone tools, but spear points had yet to be found,” said Michael Waters, distinguished professor of anthropology and director of the Center for the Study of the First Americans at Texas A&M. “The dream has always been to find diagnostic artifacts that can be recognized as older than Clovis. The populating of the Americas during the end of the last Ice Age was a complex process, and this complexity is seen in the genetic record. Now, we are seeing this complexity mirrored in the archaeological record.”

A Texas A&M veterinarian and a team at SeaWorld San Antonio successfully performed the first cerebrospinal fluid tap on a live bottlenose dolphin named Rimmy.

Making a Splash at SeaWorld

Nick Jeffery, a professor in the Department of Small Animal Clinical Sciences in the College of Veterinary Medicine & Biomedical Sciences at Texas A&M University, joined a team at SeaWorld San Antonio to perform the first-ever cerebrospinal fluid tap on a live bottlenose dolphin.

The groundbreaking procedure was completed on Rimmy, who was deserted in 2017 when she was approximately 3 years old. She was rescued and treated for 14 months for ailments, including pneumonia and nasal parasites. Ultimately, it was determined that Rimmy could not be rehomed until doctors confirmed that she did not have a bacterial infection of the central nervous system or brain. Now, thanks to Jeffery’s procedure—which identified that she was free from infection—Rimmy has a better chance at finding a permanent home living with other dolphins.

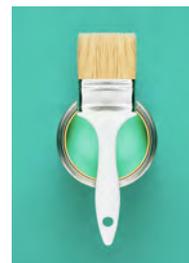
“We do spinal taps commonly in dogs, and while I initially thought it would be very different in dolphins—because of the shape of the skull and since the relationship of the brain to the spinal cord is completely different—I realize after completing the procedure that it is relatively straightforward,” Jeffery said. During the procedure, blood samples were also collected to examine how the anesthetic drug was metabolized, which could make future anesthetic procedures more routine at other facilities caring for dolphins and whales.

test results



Texas A&M aerospace engineers Raktim Bhattacharya and Robert Skelton are **developing designs for larger, lighter wind turbines.** Wind power is a rapidly-growing source of electricity supply and the largest source of renewable power generation. The new turbines will maximize energy absorbed from the wind and be easier to transport.

Brent Fortenberry, associate director of Texas A&M’s Center for Heritage Conservation, **is taking the center’s mission to Bermuda, where he and a team are determining the original colors of the island’s historic homes.** Using high-powered microscopes, analysts are creating a palette of historically accurate colors that will assist in preserving some of the island’s oldest buildings.



Texas A&M and Yale University researchers are collaborating to **develop a wrist-worn, cuffless blood pressure monitoring system** that can be used to diagnose and manage patients with high blood pressure. Current methods of measuring blood pressure involve periodically inflating a cuff, which is bothersome during the day and interrupts sleep at night for those suffering from hypertension.



new gifts



Recent Grads Honor Friend

To celebrate the life of their friend, Caroline Killian '18, who passed away following a traffic accident in 2017, Lauren '16 and Alden Warr '16 established a scholarship for Mays Business School students. "Caroline lived a life worthy of being honored in a meaningful and lasting way," Alden said. "She loved Texas A&M with her whole heart and shared that love with everyone she encountered."

A Fish Camp counselor and marketing major, Caroline embodied the Aggie Spirit. "I met Caroline in high school and was overjoyed when she decided to attend Texas A&M," Lauren said. "Simply put,

Lauren '16 and Alden Warr '16 established a scholarship for Mays Business School students to honor their late friend.

Caroline was pure joy. She was overflowing with energy and love, and her friendship is something I will cherish forever."

Lauren and Alden hope their gift gives future Aggies the chance to love Texas A&M as deeply as Caroline did. "Lauren and I were afforded many opportunities by Aggies before us, so it was only natural to honor their legacy by continuing to pay it forward," Alden said. "I can't think of a better investment than that of educating future Aggies, and on top of that, honoring Caroline's life."

Bringing Industry into the Classroom

Through a \$1 million endowment, Marilyn and Don Lummus '58 are supporting professors of practice in the College of Engineering.



After graduating from Texas A&M University, Don Lummus '58 received an MBA from Harvard University. While his days as an Aggie undergrad taught him the importance of

hard work, what stayed with him from his time at Harvard was the type of professors there—many of whom came from industry with real-world experience they passed on to students.

Lummus is a former CEO of Stewart Systems Inc. and a retired director of the Middleby Corp., which acquired Stewart in 1983. His achievements in business enabled him

to give back to Texas A&M. He remembered the impact of his Harvard professors and decided with his wife, Marilyn, to create a \$1 million endowed professor of practice in the College of Engineering. "It's important that students can interface with professionals with real-world experience who can talk nuts and bolts," Don said. "They get a greater springboard to an engineering career by studying under people who recently worked in industry."

The College of Engineering currently has 65 professors of practice, with a combined total of roughly 1,000 years of industry experience, who are teaching more than 100 engineering classes. The Lummus' gift falls in line with the college's long-term goal to increase the number of professors of practice to ensure that students are prepared for their careers.

Inspiring Innovation



Marlene Lepkoski '90 describes her life as a series of firsts. Her first plane ride brought her to Texas A&M University, her first job resulted in a full-fledged career at Johnson & Johnson (J&J), and her first gift to the School of Innovation—also the school's first gift—will open unlimited opportunities for pioneering students. However, none of this would have been possible without a single word: "Howdy!"

"I always say, 'Texas A&M had me at Howdy,'" laughed Lepkoski. In the 1980s, she traveled from her home state of New Jersey to visit a friend at Texas A&M and fell in love with the warm and welcoming campus atmosphere.

After graduating, Lepkoski began her

career at J&J, where she now serves as head of regulatory engagement and development. Her career has taught her about ingenuity, resourcefulness and finding opportunities—lessons that align with Texas A&M's I-School mission.

Established in August 2017, the I-School is a hub for creativity and problem-solving that helps Aggies prepare for the working world by completing interdisciplinary projects. Lepkoski's \$25,000 endowed scholarship, created with matching funds from J&J, will support students involved with the school.

A family tragedy led Anne and William McLean '51 to establish two scholarships for nursing students.



Couple Supports Nursing

After tragedy struck their family in 2011, Anne and William McLean '51 began a journey of healing that included giving back. When William's son, Pat, daughter-in-law, Deena, and granddaughter, Shauna, were killed by Shauna's estranged husband, the couple created two nursing scholarships in their memory.

The Deena Kay McLean Memorial Scholarship in the Texas A&M College of Nursing supports graduate students working toward careers as nurse practitioners. "We've heard about the critical shortage of primary health care providers, and nurse practitioners are often inclined to work in areas that have limited access to health care," said William. "That's why we wanted to support these students."

Meanwhile, the Shauna Kay McLean Endowed Scholarship will be awarded to either an undergraduate or graduate nursing student, providing the greatest flexibility to support a student in need. "We wanted something good to come from this terrible loss," said William. "Supporting nursing students who are dedicated to providing health care for others is a very good cause."

Doug Randolph, founder of the Randolph Foundation for Higher Education, gave a \$1 million endowment to support the university's handball team. Handball was approved as an intramural sport in 1925. The gift will support faculty who teach handball and aid the team as they compete in tournaments.



Longtime Texas A&M supporters Amy '84 and Tim Leach '82 created an excellence fund for the Texas A&M AgriLife Extension Viticulture and Fruit Lab in Fredericksburg, Texas.



The facility, located in the heart of the Texas wine-grape and fruit-growing area, provides education and research related to sustainable production. The couple also provided the lead gift to name the Leach Teaching Gardens at Texas A&M and its accompanying Leach Vineyard.

In addition to creating a President's Endowed Scholarship, Heather and Patrick Conway '96 gave an endowed gift to support student participation in the Champe-Fitzhugh International Honors Leadership Seminar. This program, now renamed the Conway-Fitzhugh seminar in their honor, takes incoming freshmen who are either National Merit, Achievement or Hispanic scholars to Italy for a two-week leadership experience.



All Roads Lead to Home

Inspired by a life of travel, Kari Lervick and John West '87 support study abroad programs by creating a bequest to supplement their current scholarship.

BY MORGAN KNOBLOCH '20

Before John West '87 launched his career in management consulting, which eventually took him across the country and even overseas, he found his niche for business as an undergraduate at Texas A&M University. After graduating and landing his first job in Houston, he soon moved from California to Tennessee, then to Georgia, Minnesota and finally, Virginia. Before his final stop in Virginia, however, John managed a team of consultants in India for a few years—making several trips across the globe that left a major impression on him.

“My time in India highlighted the importance of global citizenship,” he said. “In today’s world of integrated financial markets, supply chains and economies, we’re all global citizens, and we really need to live accordingly.”

That realization led John and his wife, Kari Lervick, to create an endowed scholarship in 2017 using matching funds to support students participating in Texas A&M’s Reciprocal Education Exchange Program. This program allows Aggies to take classes directly from a foreign partner institution, giving them a truly immersive experience. “We hope students use this scholarship to gain an understanding of other cultures and acquire the necessary skills for success in an increasingly connected world,” Kari said.

After 28 years of traveling, a family trip back to College Station last year reminded John of why he chose to attend Texas A&M. As he took in all the campus changes, he still found the same Aggie Spirit that captivated him so many years ago. “I felt a deep sense of nostalgia and pride while showing Kari and my youngest son around campus,” he said. “My family heard me talk about my memories of Texas A&M for years, but they had never seen the university. We loved every minute of our visit.”

With Aggieland fresh on their minds, the couple decided to create a gift in their estate plans that will supplement their current gift for study abroad scholarships. In addition to seeing their generosity take effect now, they know their planned gift will continue to support students’ experiences abroad after their lifetimes.

Through their gifts, John and Kari are helping Texas A&M remain the No. 1 public university in the nation for the number of students studying abroad, according to the Institute of International Education. “We strive to be leaders in providing accessible, flexible and quality education abroad experiences to our students,” said Holly Hudson, Texas A&M’s executive director for study abroad programs. “Study abroad exposes participants to diverse cultures,

Kari Lervick and John West '87 created a gift in their estate plans to amplify and support students' study abroad experiences.



Dual-Gifts Maximize Impact

Establishing a planned gift to supplement a cash gift, like John and Kari, allows you to increase your impact in a way that outlasts your lifetime. Not only will you see your generosity take effect with your current gift, but you can also rest assured that your legacy will continue to grow in the years after your life, doubling the reach of your generosity.

You can utilize several different giving methods to create the gift package that best suits your needs. Creating a bequest through your will or trust is one of the easiest ways to make a planned gift. You can gift a percentage of your estate, a specific asset, or the balance or residue of your estate. In addition to supporting Texas A&M, bequests allow you to retain assets during your lifetime and lessen the burden of taxes on your family.

environments and people. Learning how to appreciate diversity is critical for our country and for future leadership.”

With his career experiences behind him, John now spends time with family, volunteering in his community and coaching his daughter’s softball team. He and Kari hope that their gifts broaden student perspectives and help Aggies build community wherever they go. “Learning how to listen to people with empathy while respecting their opinions builds trust, which is the key

to strong relationships, both professional and personal,” John added. “Being able to work with people who are different than us is vital as we continue to move toward a global society.” ©

TO DISCUSS HOW PLANNED GIVING CAN BENEFIT YOU, YOUR FAMILY AND TEXAS A&M UNIVERSITY, CONTACT GLENN PITTSFORD '72 AT GPITTSFORD@TXAMFOUNDATION.COM OR (800) 392-3310.

In the crazy way that unassuming things will change your life, a story about fleas altered mine. Around 1991, I heard a talk by the late Zig Ziglar, a motivational speaker, who told an eye-opening anecdote: To train a flea, he said, you put it in a jar with a lid. The first day, the flea will jump and hit the lid over and over. The next day, it won't jump as much; and by the third day, it has

learned to jump only as high as it needs to jump to avoid hitting the lid. At that point, the flea is conditioned to believe the height of the jar is as high as it can jump, and when you take the lid off, the flea will never jump higher than the jar again.

Ziglar said to the audience, "You are just like this flea. Each of us carries around jars of our own limiting beliefs, and once

Engineering My Life

How I went from a NASA aerospace engineer, to a motivational speaker turned comedian, to a professor of practice at Texas A&M University.

BY SHAYLA RIVERA '83
PROFESSOR OF PRACTICE AND DIRECTOR OF ENGR^(X)
COLLEGE OF ENGINEERING



“If you take risks, go in the direction you’re drawn to and let yourself be inspired, opportunities will arise that you cannot see today.”

—SHAYLA RIVERA '83

you are aware of how you limit yourself, you can jump out and change your life.”

It was like—WHOOSH! Mind blown. In that moment, I decided I wouldn’t place limits on my life or my capabilities; and as it turns out, that conscious decision eventually led me to Texas A&M University for the second time in my life.

Funny Rocket Scientist

Let me back up and start at the beginning: I was born and raised in Puerto Rico, and despite speaking very little English at the time, I came to Texas A&M in 1979. I studied aerospace engineering because my parents expected it, and they were paying. But I also loved it because I’m a huge science geek!

My first job after graduation was with NASA’s Space Shuttle and Space Station programs, where I helped develop software simulating the critical points of missions, like ascent and entry. I worked with NASA for five years until I found my way into technical sales.

That career path was different because while I still used my engineering degree, I also needed good interpersonal skills. It was also the first time I was exposed to professional development. I attended sales trainings and learned about personality types, interacting with people and managing life. I was in awe. I saw the value of these ideas and decided I wanted to become a trainer.

I pleaded my way into a corporate training job working and learning from Houston stress management expert Robert Pennington, but it wasn’t until I heard the flea story that I took the risk to pursue motivational speaking myself. I did small gigs at night, and then people began telling me, “You should try comedy!” I was so offended

by that (like hey, I’m trying to be enlightening here, what’s wrong with you?), but I heard it enough times to finally try it in 1993, and I’ve been doing stand-up comedy ever since. I tell everyone: “The best way to learn, grow and change—in other words, become enlightened—is to lighten up.”

Texas A&M: Take Two

Eventually, I was invited to speak at Texas A&M, and after one of my motivational talks a few years ago, someone suggested I teach here. I said, “Excuse me? That’s not even possible; I’ve only got a Bachelor of Science!” But it stuck with me, and when College of Engineering Dean Katherine M. Banks asked me to join the university’s engineering program in 2017, I said yes.

Today, I am an engineering professor of practice, which is a perfect fit for me. Professors of practice are industry professionals who have practical experience outside of academia and bring that perspective to students. As our program leader, Col. Mark Johnson '78, likes to put it, “We have done what you are learning to do.”

I am also the program director for ENGR^[x], which I like to call “engineering the engineer.” This initiative is about the development of students’ soft skills, or “power” skills. When students enter industry, they will learn that it’s not about what you know; it’s more about who you are. Can you lead? Are you a good team member? Are you ethical? Compassionate? Can you communicate effectively?

To cultivate these skills, the ENGR^[x] requirement gives students their entire undergraduate time to participate in a high-impact experience and then complete a meaningful self-reflection discussing the

impact of this experience in their development. Activities include study abroad, internships, co-ops or similar experiences. I have a lot of ideas and plans for ENGR^[x] that I’m excited to introduce. But mostly, I’m excited to help students become more well-rounded, confident individuals by the time they enter the job force.

So here I am, full circle at Texas A&M. Thirty-five years ago, I became an aerospace engineer, and I didn’t know that I could be a motivational speaker or a comedian. Three years ago, I didn’t know that being a professor of practice was a possibility. But I do know this: In life, if you take risks, go in the direction you’re drawn to and let yourself be inspired—even by something as bizarre as fleas—opportunities will arise that you cannot see today. And they will take you exactly where you’re supposed to be. Where I am right now, at Texas A&M, is where I’m supposed to be. ☺

TO SUPPORT PROFESSORS OF PRACTICE OR ENGR^[x] IN THE COLLEGE OF ENGINEERING, CONTACT:

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viewpoint





Wanderlust

While traveling with the Broad Street Society, a learning community of high-achieving public health students who take honors classes and travel abroad together, Holly Novak '21 and her friends raised a "Gig 'em" in front of the Hungarian Parliament Building, one of the most historic landmarks in Budapest.

She and her friends are part of more than 5,000 Aggies who annually participate in education abroad programs, which

range from taking classes at international institutions to researching, working or volunteering overseas. For the third consecutive year, Texas A&M was ranked the No. 1 public university in the nation for the number of students studying abroad and the No. 2 university overall, according to totals from the Institute of International Education and the U.S. Department of State's Bureau of Education and Cultural Affairs.

Study abroad opportunities are available for all Texas A&M students, freshmen through Ph.D. candidates. Programs last from one week to one year, and students can study individually or in large groups. The most popular destinations are Germany, the United Kingdom, Italy, Costa Rica and Mexico.

While such experiences give Aggies a firsthand understanding of different cultures and a competitive edge in the job

market, costs are often a barrier. You can create a study abroad scholarship with a \$25,000 gift, payable over a five-year period, which will provide enough income to help fund a student's experience annually. You can also choose to leave a study abroad scholarship through your estate. To learn more, contact Marcy Ullmann '86 at (979) 845-6383 or mullmann@txamfoundation.com. ©



LAND GRANT

The Morrill Acts of 1862 and 1890 established land-grant universities across the nation. Today, Texas A&M AgriLife oversees the university's land-grant mission of agricultural research and education.

THE TRIPLE CROWN

In 1862, the U.S. Congress instituted an idea that fundamentally reshaped higher education: It passed the Morrill Act to establish land-grant universities, thereby paving the way for Texas A&M's beginning.

In the agreement, the U.S. government gave interested states federal land, which could be sold for proceeds to establish universities devoted to agricultural and mechanical education, plus military training. This opened up fields of study that created new technological advancements and made higher education accessible to those who wanted more practical training.

Eventually, the federal government added annual funding for upkeep and maintenance of the land-grant universities and something else—obligations. "Education, research and extension," stated the directive in the 1914 Smith-Lever Act. The driving idea was that research done at land-grant universities should be shared with the public for the greater good.

In 1971, Texas A&M added to its land-grant designation by being named a sea-grant institution for its work in oceanography; the space-grant designation followed in 1989, recognizing the university's commitment to space research. Only 16 other universities nationwide have achieved this triple crown of land, sea and space.

In honor of three decades of serving the public as a land-, sea- and space-grant institution, here are 12 examples of Texas A&M programs and research that have impacted society and improved lives.

● BY JEANNIE RALSTON



The National Space Grant College and Fellowship Program was created by the U.S. Congress in 1988. A network of 52 space-grant institutions conduct research, education and public outreach activities in science, technology, engineering and math related to aeronautics.

SPACE GRANT

Texas A&M celebrates 30 years of being named a land-, sea- and space-grant institution. Here's how Aggie programs and researchers are fulfilling the mission.



SEA GRANT

The National Sea Grant College Program, instituted by the U.S. Congress in 1966, is a federal-university partnership between the National Oceanic and Atmospheric Administration and 33 colleges and universities.

LAND GRANT

How is Texas A&M fulfilling its land-grant mission?

I

Improving Health—For more than 100 years, the people of Texas, particularly those in rural areas, have relied on Texas A&M AgriLife Extension Service county agents for solutions to better their lives. Recently, the extension agency has added a very important mission: helping Texans get healthier.

A new pilot program called Healthy South Texas combines the expertise of the Texas A&M Health Science Center with the reach of the Extension Service to promote preventive health in 27 South Texas counties, where rising obesity rates, emerging infectious diseases and limited access to health care create particular risks.

“We are doing for health what extension agents have done for agriculture for more than a century—essentially creating a new ‘crop’ of extension agents, poised to empower Texans to take control of their own health and wellness,” said Texas A&M Chancellor John Sharp ‘79 at the launch of the effort in 2015. Since then, more than one million community members, health care professionals, students and local officials have participated in workshops, screenings, consultations and other events.

Through diabetes and asthma self-management, medication assistance and direct medical care services, the Healthy South Texas program has saved an estimated \$58.8 million in state and individual spending. Look for the initiative to move across the state as more regions receive the benefits of grassroots health care.



2

Combating Malnutrition—Cotton is one of the largest cash crops in the world, and aside from the fluffy white balls, the plants also produce seeds. Unfortunately, however, cottonseed has historically been unfit for people to eat due to the presence of gossypol, a toxic compound.

But using advances in biotechnology, Texas A&M soil and crop sciences professor Dr. Keerti Rathore and a team of researchers produced a cotton plant with gossypol levels in the seeds low enough for human consumption. Last fall, the plant was approved by the U.S. Department of Agriculture. “This means that cottonseed can potentially provide the protein requirements for 590 million people per year,” Rathore said.

“The kernels from the safe seed could be ground into a flour-like powder after oil extraction and used as a protein additive in food preparations or perhaps roasted and seasoned as a nutritious snack,” he added. Not only does his team’s success represent a major stride in combating global malnutrition, but there’s also another bonus: Making use of the cottonseed byproduct will help boost farmers’ incomes.





3

Engineering More Efficient Crop Management—Most farmers handle weed control by walking through their fields, looking for weeds. But in large-scale operations, this tremendously inefficient process equates to a massive game of hide and seek.

Dr. Muthu Bagavathiannan, a Texas A&M AgriLife Research weed scientist, is helping imagine a new era of “smart” agriculture. His plan is to give farmers a better-than-bird’s-eye view of fields through **unmanned aerial vehicles**. “Our goal is to use advanced sensor technology to detect weeds from above the ground and implement precision weed management,” he said.

Using drones and technology such as multispectral cameras, this new process should enable farmers to detect and assess weeds sooner and more efficiently than with the naked eye. Algorithms are being developed to make identification easier, equating to savings in time and money for farmers. It will also allow them to use chemicals in a more directed way to better benefit the environment. “We are generating a database of critical, fundamental information about weed species characteristics,” said Bagavathiannan, “and ultimately, we will develop cost-effective technology.”

4

Breeding Better Beef—In Texas history, cattle and cowboys alike have a mythic importance. While the cowboy mostly exists in legend today, the beef business is as important as ever. Cattle and calves are the No. 1 cash agricultural product in the state, with a value exceeding \$10 billion per year. What’s more, Texas is the No. 1 beef cattle state in the country, while the U.S. is the No. 1 beef cattle producing country in the world.

In recognition of the importance of beef cattle and Texas A&M’s vast expertise in this area, the Department of Animal Science recently established the **44 Farms International Beef Cattle Academy**—a **flagship program that will certify industry professionals, producers and researchers on the latest information in beef cattle production, quality and safety**. All instruction is online and customized to the educational and professional needs of each participant. The first cohort of 13 students—from the U.S., Australia, Romania, the Dominican Republic and more—will complete the academy in August.

“Our goal is to be recognized as the world leader in beef production genetics, management and products,” said Dr. G. Cliff Lamb, department head of animal science. “We believe that beef cattle producers throughout the world will benefit from understanding the latest information associated with the production and preparation of beef. This will have a positive impact on the global supply of beef and help sustain an environmentally-minded, safe, high-quality animal protein for people throughout the world.”

Founded in March 2018, the academy received an important boost last fall when 44 Farms, based in Cameron, Texas, provided a lead gift to be the program’s sponsor.



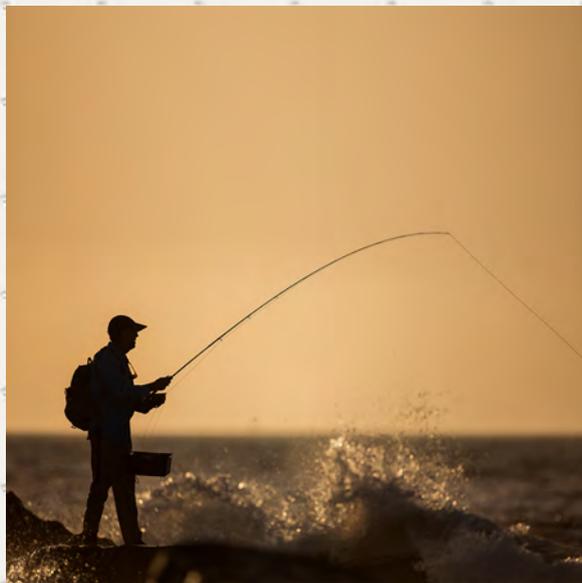
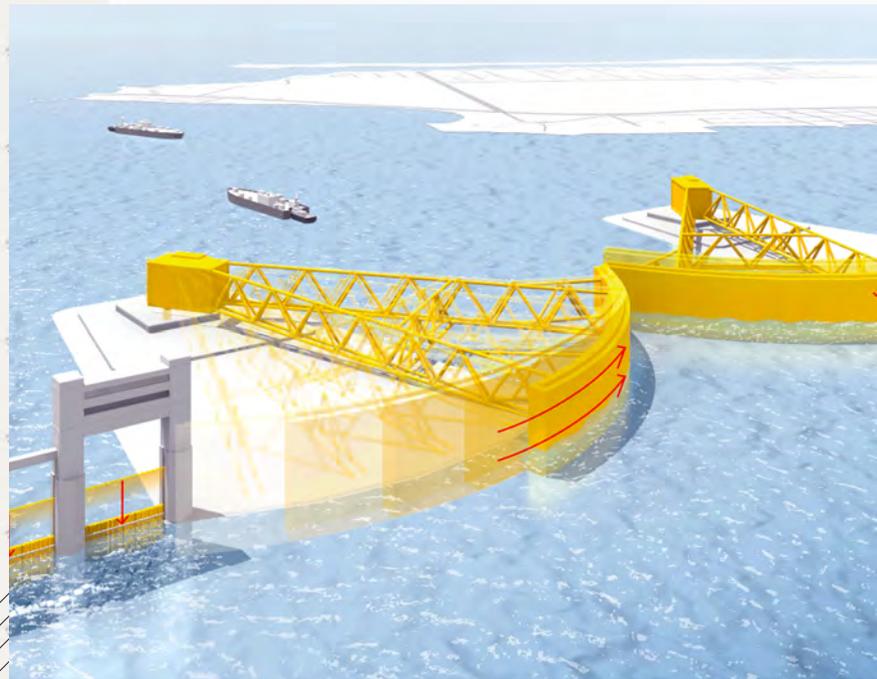
SEA GRANT

How is Texas A&M meeting its sea-grant mission?

5 Protecting Our Coasts—Hurricanes are a constant threat to the Texas coast. “Every time June rolls around, I get nervous,” said Dr. Samuel Brody, director of the Center for Texas Beaches and Shores (CTBS) at the Texas A&M Galveston campus. “It’s like we’re playing Russian roulette with our future. I get up every day and think, ‘How can I save property and lives?’”

It turns out that Brody and his staff at the CTBS are doing a lot. They have created an interactive atlas that models flooding levels in coastal communities and **devised an engineering marvel—the Ike Dike—that would protect the greater Houston area from hurricane storm surges.**

Most recently, Brody was also the lead technical expert on a report published by The Governor’s Commission to Re-build Texas called “Eye of the Storm,” which detailed the effects of the second-costliest hurricane in U.S. history—Harvey. “It has been an honor to contribute to what is the definitive work on understanding the impacts of Hurricane Harvey and setting forth a state policy roadmap for making Texas more flood resilient in the future,” Brody said. The CTBS, which is looking to raise \$5 million to continue its work, has also issued a report on the future of urban flooding and how to combat associated risks.



6 Conducting Outreach to Coastal Communities—At many universities, researchers often write papers, publish them and then move on to the next subject. But as a sea-grant university, Texas A&M doesn’t let the story end there. Just as the land-grant program calls for a system of county agents to bring agricultural advances to the farms, the Texas Sea Grant College Program, housed in the College of Geosciences, **brings new developments in fishing, conservation and safety directly to those who can benefit from them.**

“We have agents who live and work in coastal communities who act as honest brokers and trusted resources,” said Dr. Pamela Plotkin, director of the program and Texas A&M associate research professor in oceanography. For instance, one long-time agent, Gary Graham, was instrumental in getting fishermen to use turtle excluder devices that helped save the Kemp’s Ridley Sea Turtle in the Gulf.

The Sea Grant Program even saves human lives. After people were dying in dangerous rip currents on the Texas coast despite a plethora of warning signs, program researchers determined that the signs, designed decades ago, were difficult to interpret correctly. New signs are in the works.

But information doesn’t just flow one way. Every four years, the program surveys people in coastal communities to learn what issues they need help solving. From red tides to aquaculture, the Sea Grant Program takes it all on.

Researching Our Seafaring Past__In 1300 B.C., a ship sank in an area called Uluburun in Southern Turkey. For millennia, the ship lay at the bottom of the ocean, its cargo and secrets hidden from the world—until 1984 when the Texas A&M Nautical Archaeology Program (NAP) and the Institute of Nautical Archeology (INA) began an 11-year excavation project.

“It has yielded one of the largest and richest assemblages of Bronze Age trade goods and raw materials ever found,” reported Donny Hamilton, director of the university’s Conservation Research Laboratory. “The finds provide significant insight into the Late Bronze Age maritime and terrestrial trade in the Mediterranean.”

Preserving cultural heritage is one way the NAP, part of the Department of Anthropology, serves the public. In addition to the Uluburun, which is the oldest ship ever recovered, the program and INA have excavated the city of Port Royal, Jamaica, which served as a pirate haven until it sank into Kingston Harbor in a 1692 earthquake. Also recently completed was the conservation of La Belle, the ship captained by the French explorer La Salle. Sunk in Matagorda Bay in 1686, the reconstructed ship is now a major exhibit at the Bullock Texas State History Museum in Austin.

The NAP has seven full-time faculty who oversee conservation labs and teach courses in ship design and construction, the history of seafaring, naval treatises and conservation of artifacts.



7

8

Training Oceans Stewards__In 2014, chemical weapons in Syria were big news. The media was filled with reports on efforts to disarm the war-torn country. What didn’t make headlines was that the ship that safely disposed of the chemical weapons was crewed by U.S. mariners and captained by Rick Jordan ’80, a graduate of the Texas A&M Maritime Academy at Texas A&M Galveston.

This is just one example of how the academy, one of only six maritime academies in the U.S., serves the public good. The academy educates and trains cadets to operate ocean-going vessels safely and in compliance with pollution control laws. Every year, nearly 300 cadets study seamanship, navigation and marine engineering in addition to participating in summer training cruises to put their skills and knowledge into practice. “We also emphasize the Aggie core values,” said Rear Admiral Michael Rodriguez, superintendent of the academy. “We reinforce the notion that our core values are not just important on campus, but also matter at sea, in the corporate world or in a military organization.”

Rodriguez points out that academy graduates serve on vessels in the U.S. and worldwide that support the military, patrol our shores, and carry consumer goods, fuel and building materials.



SPACE GRANT

How is Texas A&M executing its space-grant mission?



9

Feeding Our Astronauts—Not many people would want to eat 7-year-old food, but if the food was prepared at the Food Technology Facility for Electron Beam and Space Food Research located on the Texas A&M campus, that's a different story. Food prepared here is sterilized and stabilized by high-pressure, high-temperature technology called thermostabilization.

"The food has to be nutritious, visually appealing and taste as good or better than food consumed on Earth," said Dr. Suresh Pillai, director of the National Center for Electron Beam Research and the principal investigator of the space food processing project on campus. "It needs to be free of organisms that could impair the health of astronauts, customized for each individual and packaged to meet space travel needs of reduced mass."

The center is meeting this need and exploring other technologies, such as electron beam food processing, to offer NASA and the private space industry options when designing meals for astronauts. Additionally, foods processed by electron beam can also be used for immunocompromised patients in hospitals and in emergency situations.

"We are trying to use electron beam technology to improve foods, make better vaccines, clean the environment, and enhance and sustain the food supply," explained Pillai. "There is potential for stocking healthy vending machines, supplying food to hospitals, or responding to national emergencies where people need foods that are microbiologically safe and nutritious."

10

Advancing Superhuman Flight Speed—How fast is Mach 5? The easy answer is roughly one mile per second. The mind-blowing answer is: fast enough to alter the internal structure of air molecules as an aircraft moves through the atmosphere.

As we set our sights on faster and farther air and space travel, scientists need to know how the viscous flow around an aircraft will impact safety and efficiency. **The only way to test hypersonic speeds is through wind tunnels and computer modeling, and the Department of Aerospace Engineering is on the front lines of this research.** The National Aero-thermochemistry and Hypersonics Laboratory (NAL), based at Texas A&M, has installed a hypervelocity tunnel that generates high temperatures and high pressure to simulate shock waves and other types of disturbances that are encountered at high speeds.

"As vehicles travel through the atmosphere, they create shock waves. And as molecules go through these shock waves, they get excited, dissociate and chemically react," said Dr. Rodney Bowersox, aerospace engineering department head and director of the NAL. "When things travel fast, they get hot; we're looking at innovative ways to keep them cool."

The data accumulated will be used to guide mathematical model development and prediction tools at high temperature conditions.





Exploring Mars (or the closest thing to it)—When NASA’s Mars 2020 mission lands on the red planet, two places on Earth will have a big stake in its success: College Station and Iceland. Dr. Ryan Ewing, an associate professor in Texas A&M’s Department of Geology and Geophysics, is conducting research to prepare a rover and a drone for the terrain found on Mars, and Iceland offers the closest match.

Together with a team, he will spend three weeks in Iceland during summers 2019 and 2020 testing artificial intelligence (AI) technology with a rover. “Our rover will use AI to interpret the terrains,” he explained. “AI will be a key technology deployed for space exploration, but its uses for operating a robotic rover are not well tested.”

The Icelandic terrain offers many similarities to the Martian landscape: an abundance of igneous, basaltic rock and sediment; glaciers and fluvial systems similar to Martian ancient river systems; and wind-blown material similar to the sand dunes that cover Mars today. The rover and the drone will be outfitted with cameras and sensors that assess the terrain as they move over it.

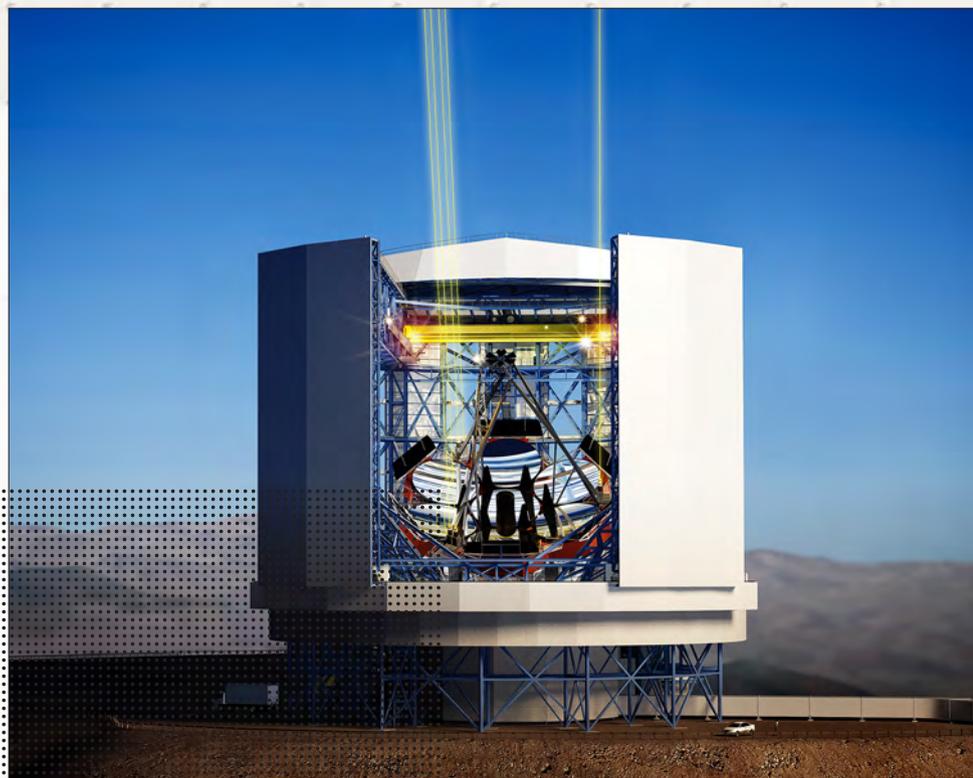
“Scientifically, we are interested in how basaltic particles change as they are eroded and move through rivers and sand dunes,” said Ewing. “Understanding this system can tell us how the Martian landscapes have evolved and if they could have hosted life.”

Seeing the Depths of the Universe—Las Campanas Peak in Chile’s Atacama Desert is high and dry, which are two of the attributes that attracted astronomers when they were deciding where to locate the newest, most advanced tool for looking into space—the Giant Magellan Telescope (GMT). At 8,500 feet in altitude, Las Campanas Peak should provide optimal viewing conditions for more than 300 nights a year.

Texas A&M is part of an international consortium of universities that manages the GMT. “The birth of the universe as we know it—the stars, galaxies and the beginning of the formation of the elements on the periodic table—is just beyond the reach of present telescopes on the ground and in space,” said Dr. Nicholas Suntzeff, a distinguished professor and holder of the Mitchell-Heep-Munnerlyn Chair in Observational Astronomy in the Department of Physics & Astronomy. “As the first giant telescope to peer into the sky, the GMT will map out the birth of these galaxies and stars.”

Construction began last fall, and once completed, the GMT will be equipped with seven 8.4-meter primary mirror segments, each weighing 20 tons. **The GMT will be capable of collecting 70 times more light than the Hubble Space Telescope and will provide images up to 10 times sharper.** Philanthropist George P. Mitchell ’40 was an early supporter who donated more than \$33 million to the project.

The GMT impact could be so profound that it changes much of what we know about human history and our place in the universe.







Ever since he began his studies at Texas A&M University, Dr. Mark Benden '90 '92 '06 has been in the comfort business. He was on the ground floor of the ergonomic chair movement, even inventing, patenting and marketing an adjustable, rotating armrest while still a graduate student. But about a decade ago, Benden, now associate professor and head of the School of Public Health's Department of Environmental and Occupational Health (EOH), had a moment of enlightenment: By making a sedentary lifestyle more comfortable, he was contributing to a behavior that leads to obesity and its plethora of negative health effects. Benden realized he didn't need to encourage people to sit: He needed to encourage them to stand.

BY KARA BOUNDS SOCOL



COMFORTABLE SEATING, EASY-TO-HOLD MEDICAL DEVICES AND STANDING DESKS ALL FALL UNDER THE ERGONOMICS UMBRELLA. ERGONOMICS PLAY A PIVOTAL ROLE IN THE OVERALL FIELD OF PUBLIC HEALTH—THE SCIENCE OF PREVENTING DISEASE, PROLONGING LIFE AND PROMOTING HEALTH.



After Benden arrived at Texas A&M from his home on the East Coast, he joined the Corps of Cadets and planned to become a physician. But in his senior year of biomedical engineering, his plans changed. “I took ergonomics as an elective, and it was a game-changer,” Benden recalled. “It presented me with the opportunity to apply my engineering skills to make people more comfortable. That class sparked the entrepreneurial bug, which I never got over.”

As a physician, Benden said, he would be able to treat one patient at a time. But as an ergonomist and inventor, he could find ways to prevent illness and injuries from occurring in the first place by either creating products or redesigning existing ones, helping infinitely more people in the process.

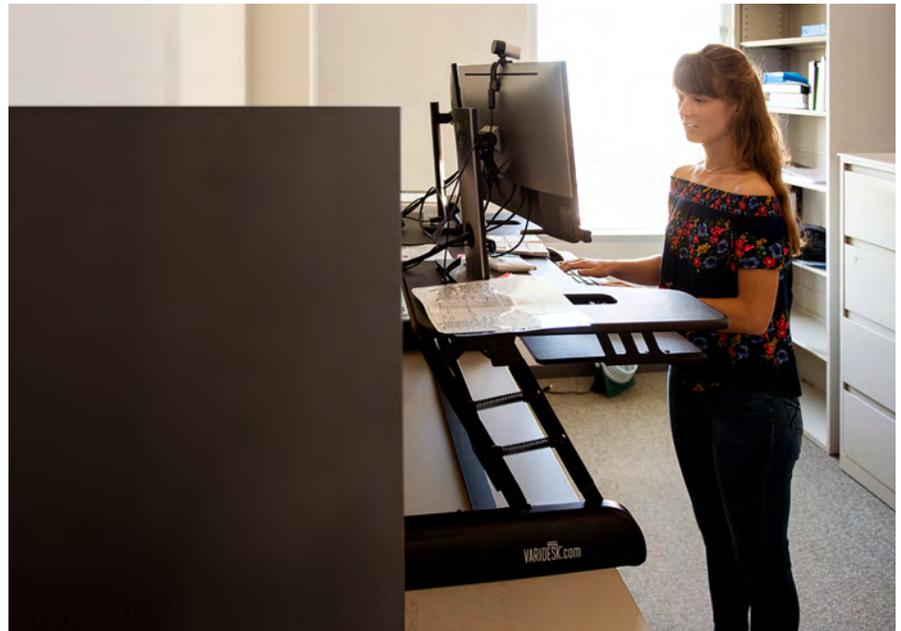
Contributing to this entrepreneurial passion was Benden’s leading college mentor, Dr. Jerome Congleton, founder—and now director emeritus—of the Texas A&M Ergonomics Center. As Texas A&M’s first active faculty member to license a product, Congleton pioneered the commercialization culture on campus.

After attaining his undergraduate degree, Benden remained at Texas A&M to study industrial engineering, focusing on ergonomics. Before graduating with his master’s, he had secured his armrest patent.

A GOOD FIT

Early in his ergonomics studies, Benden realized that designing answers relied on a key question: How do we get things to fit people rather than making people fit things? “When there’s a mismatch,” he said, “bad outcomes are bound to happen.”

For 20 years, he developed answers to this question while developing products for



companies such as Johnson & Johnson and Bryan-based Neutral Posture, owned by the Congleton family. When Benden’s time at Neutral Posture ended in 2008, his partnership with Congleton continued in a different capacity. Benden had received a doctoral degree in interdisciplinary engineering from Texas A&M two years earlier, and Congleton asked him to join the university’s EOH faculty and co-direct the Ergonomics Center.

By that time, Benden’s interest in ergonomic chair design had been overshadowed by his desire to combat America’s obesity epidemic. “As an undergraduate, I focused on finding what was wrong and then treating it,” he explained. “I had laser vision. But once those blinders were off, I realized the question should be: ‘How can I keep people from getting sick in the first place?’”

Americans are obsessed with weight loss, he said, when they should be adopting calorie-burning behaviors that will keep weight off in the first place. “What’s changed in our culture is that we’ve replaced opportunities to stay in motion with screen time,” he said.

Benden readily concedes that spending the day in front of a computer isn’t a choice for many people—it’s a job requirement. He therefore considered a way that desks could

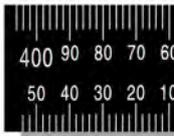
encourage movement, rather than requiring people to leave their desks in order to move. Users of adjustable, stand-capable desks often forget to raise the desks, while those using immovable standing desks don’t sit down. But by adding a footrest-equipped stool to the stationary desk to create a “stand-biased” desk, Benden said, users stand more, move more and burn more calories.

With this new mission of movement in mind, Benden created Positive Motion—his first of two faculty startups. The company’s success in creating standing desk office environments that promoted comfort, health and productivity gains was noted by the Centers for Disease Control and Prevention (CDC). In 2011, the federal agency approached him about creating a similar design for children.

CURE FOR THE WIGGLES

The rapidly escalating detrimental health effects of a sedentary culture is clearly apparent in American children. High rates of obesity-related diseases like diabetes are skyrocketing, while the ages of those affected are declining at alarming rates.

Benden therefore readily answered the CDC’s call to tackle this epidemic through the use of stand-biased desks. This resulted in a second faculty-led startup called Stand2Learn, the installation of stand-biased desks in 24



ERGONOMICS IS A BROAD FIELD THAT STUDIES HUMAN INTERACTION WITH PRODUCTS, SYSTEMS AND ENVIRONMENTS. THE SCIENCE IS AS OLD AS THOMAS JEFFERSON'S STANDING DESK AND AS ALL-ENCOMPASSING AS USER-FRIENDLY LEVERS IN WORLD WAR II FIGHTER PLANES.

College Station elementary classrooms, and CDC grants to study the results.

Findings showed that when given the choice to stand or sit on stools, children stood—and moved—an average of an hour-and-a-half longer per day than they did before the desks were installed.

Specific results revealed that children who used traditional desks over the two-year study showed a 2 percent increase in body mass index (BMI)—a rate typically associated with getting older. Those who used the stand-biased desks, however, averaged about a 3 percent drop in BMI, and a 17 to 35 percent increase in calorie burn rates.

The impacts on weight were accompanied by improved academics, increased engagement, fewer interruptions and better managed classrooms. Since the College Station experiment, Stand2Learn's stand-biased desk design has been used to produce some 150,000 desks used by more than 300,000 children in classrooms around the world.

LOOKING AHEAD

Today, in addition to his stand-biased desk design, Benden holds 22 U.S. patents for ergonomic, health and industrial products, as well as many other U.S. and international patents pending in other fields. The lifetime value of his inventions is estimated at more than \$1 billion.

Currently, he is helping to develop intelligent, customizable software that can be integrated into stand-capable desks. Not only does the software prompt users to raise and lower the desks, but it also monitors such factors as the number of words the user types per minute, the number of times they click the mouse and where their eyes go on the computer screen. Benden explained that this infor-

mation creates a unique, digital "fingerprint" of each user in order to determine behavioral changes that can improve long-term health.

Benden is also lending his expertise at the Reynolds & Reynolds Entrepreneurship Bootcamp for Veterans at Texas A&M's Mays Business School. As an Army veteran and entrepreneur, he offers guidance with business plan development and giving product pitches.

Last year, Benden sold Stand2Learn to Varidesk, a leader in the field of active workplace products. With the proceeds, he and his wife, Teresa '88, established an endowed scholarship for students in the EOH department. Benden hopes their gift will help finance-strapped, first-generation college students like him afford a university education.

While Benden still cherishes the time he gets to play in his workshop, these days, he also thrives on interacting with students. "The part of teaching that is most rewarding is seeing my students develop and grow," he said. "Hopefully, I'm planting seeds like Dr. Congleton did for me. We have so many brilliant, amazing students. The ability to play a small role in their story is an incredible blessing." ©

Only two decades old, Texas A&M's School of Public Health does not yet have the legacy donors affiliated with other Texas A&M colleges. As a result, support of its faculty, programs and students—40 percent of whom are first-generation college students—is greatly needed:

TO LEARN HOW YOU CAN SUPPORT THE SCHOOL, CONTACT:

KAREN SLATER '88
DIRECTOR OF DEVELOPMENT AND
CORPORATE RELATIONS
TEXAS A&M FOUNDATION
(800) 392-3310 OR (979) 436-9108
KSLATER@TXAMFOUNDATION.COM

You've delivered lectures all over the world. What were some of your favorite spots?

"Hong Kong, the National Air and Space Museum in Seattle, and a castle in Scotland are the first ones that come to mind."

Tell us about your military service.

"I was a combat medic in the Army National Guard and a combat engineer in the Army Corps of Engineers. I retired as a first lieutenant."

What do you consider to be your coolest invention?

"I designed something called the Ambicycle after learning about an absence of ambulances in Uganda. It evacuates patients in tight, congested areas. It can fit through a 36-inch door and navigate congested streets, narrow alleyways and sidewalks. The driver sits above the patient. Unfortunately, it costs too much for a developing nation to afford."

What kind of music do you listen to in your workshop?

"I primarily listen to KSBJ, a Christian music station out of Houston."

You've designed customized workspaces for a number of noteworthy people. Who were some of them?

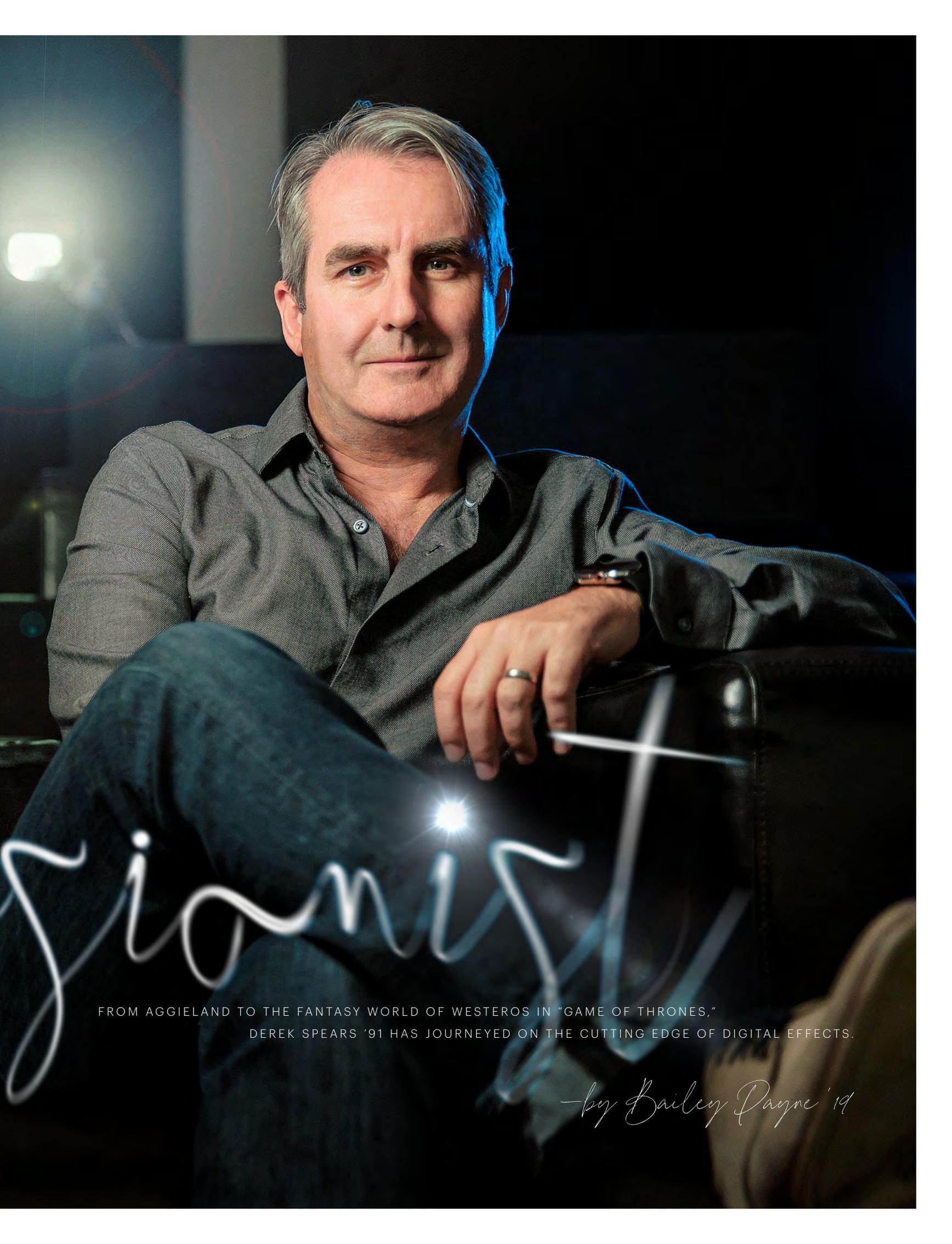
"There were many individuals in California: Pamela Anderson, Val Kilmer, corporate CEOs and many recognizable names from the technology industry. But the ones most important to me are the children benefiting from my standing school desks."

THE SCHOOL OF PUBLIC HEALTH WAS A FOUNDING MEMBER OF THE TEXAS A&M HEALTH SCIENCE CENTER. ITS DEPARTMENT OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH FOCUSES ON THE HEALTH EFFECTS OF CONTAMINANTS AND PHYSICAL HAZARDS IN THE ENVIRONMENT, HOME AND WORKPLACE.

Visual effects supervisor Derek Spears '91 knows what Benjamin Franklin meant when he famously declared that time is money. Spears' last project cost more than \$86,000 for every second of screen time, not including production costs. It was Bud Light's 2019 advertisement for Super Bowl LIII, in which the beer brand's happy-go-lucky, "dilly dilly"-chanting kingdom is invaded by a ferocious dragon from the world of "Game of Thrones."

The digital effects for the ad were produced on short notice, so much so that Spears was reluctant to specify how much time his team had to work with. "If we tell people we did it that quickly, they'll want it done that quickly every time," he joked. He and his team at the visual effects studio Pixomondo were brought onto the project in no small part due to his experience animating the dragons on "Game of Thrones" itself.

the All



zionist

FROM AGGIELAND TO THE FANTASY WORLD OF WESTEROS IN "GAME OF THRONES,"
DEREK SPEARS '91 HAS JOURNEYED ON THE CUTTING EDGE OF DIGITAL EFFECTS.

by Bailey Payne '19

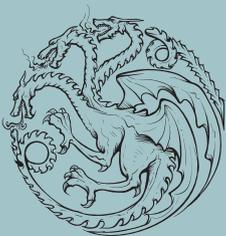
*"The biggest challenge
of working on a show like 'Game of Thrones' is
sustaining the audience's suspension of disbelief."
- Derek Spears '91*



Spears and his visual effects team rendered a scene featuring Daenerys Targaryen (actress Emilia Clarke) with one of her dragons to earn a behind-the-scenes role on "Game of Thrones." Because it took such a massive effort to bring them to life, scenes featuring the dragons are some of the show's most memorable.

Here Be Dragons

The George R.R. Martin Collection at Texas A&M



In the world of “Game of Thrones,” almost all recorded history is preserved in a vast library called The Citadel by the scholarly Order of Maesters. In the same spirit, curators at Cushing Memorial Library and

Archives preserve a sprawling collection of “Game of Thrones” author George R.R. Martin’s work. The collection includes nearly 50,000 pieces, more than 1,300 books and an assortment of memorabilia. Science

What inspired Martin to store his books and materials in Cushing Library?

Fiction and Fantasy Research Curator Jeremy Brett is one of the staff who maintains the collection.

• *Brett:* “Mr. Martin has been a longtime friend of Texas A&M. He came here for several conventions on

campus, including Other-Con and AggieCon, and made a number of friends in the College Station area. During one of these visits, our then-director Don Dyal spoke with Martin about the possibility of donating his archives to

the Science Fiction and Fantasy Research Collection, and Martin agreed. He was impressed by our collection and the way we archived materials. In 1992, he began sending materials that had been stored in his garage.”



Bring Me My Sword

Spears was born in Boston, but his parents moved south to raise him in Spring, Texas. His father, Henry Spears ’66, had earned his master’s degree at Texas A&M University in computer science, a novel field of study at the time. The elder Spears instilled in his children a curiosity for math and science as well as a hearty appreciation for Aggie football and traditions. Derek went to College Station to follow in his father’s footsteps and study electrical engineering.

Before he encountered the field of visual effects, Spears interned during summer breaks with Alliant Computer Systems, a computer manufacturing company. There, he grew interested in a digital workstation made by Silicon Graphics called the IRIS 3130, a hulking mammoth of a computer workstation with an impressive 16 megabytes of storage. If a modern-day MP3 player had the same storage capacity, it could hold about four songs.

He was intrigued by the system’s ability to create real-time 3D graphics and the possibilities that imaging technology offered at large. Spears talked his manager into allowing him to represent Alliant at SIGGRAPH, an international computer graphics conference. The wide showcase of cutting-edge digital hardware and software floored him, especially the technology being utilized in the entertainment industry. “That was when my interest in computer graphics grabbed hold, and I knew exactly what I wanted to do,” he recalled.

Over the Wall

Few electrical engineering graduates today enter the workforce with the goal of becoming digital effects artists. This was doubly so when Spears first began his career, when digital effects were as experimental as they were extravagant. He believed that competition between movie studios to produce more dazzling effects would lead to rapid advancements in computing technology. “Early digital effects captured the imagination of the world, because we saw things we could never create before,” Spears said. Art was being re-engineered, and he wanted to be on the ground floor.

Upon graduating with his bachelor’s degree from Texas A&M in 1991, Spears made a beeline toward a position at Silicon Graphics and immediately ran into a brick wall. Soon after applying, the company entered a hiring freeze. Undeterred, he worked odd consulting jobs until he found his way back into Silicon Graphics through its software development division.

When his team was brought on to help develop a pioneering digital compositing system for Kodak, Spears saw a way in. “I talked to people from Kodak’s visual effects arm, Cinesite,” he said. “I got a job there by promoting my skills at a much greater level than I was actually capable of.”

He moved to Los Angeles and acted as a computer graphics supervisor at Cinesite for three years. By 1999, Spears was a visual effects supervisor at Rhythm & Hues, where he worked on

various blockbuster movie and TV productions, such as “The Sum of All Fears,” “Superman Returns,” “X-Men: Days of Future Past” and “The Walking Dead.” He and his team created magnificent effects that integrated digital models and animation with live-action footage to create images that could never be realized with practical on-set trickery alone.

Unburnt

In 2015, Spears’ team received a special assignment from HBO producers. “We were given a simple task, which was to animate and light this one particular scene,” he said. “They wanted to see if our work could live up to their standards for the show.” That show was the hit fantasy series “Game of Thrones,” which at the time was filming its fifth season.

In the pivotal scene, a massive dragon belonging to main character Daenerys Targaryen swoops into a coliseum, shakes the ground as it lands and gobbles up enemy soldiers running for dear life. Spears’ team sent their rendition of the scene and aced the audition. HBO gave them the green light to produce the final sequence, and they sustained a strong working relationship with the show during the following seasons.

“Over the three seasons I worked on it, ‘Game of Thrones’ had a very interesting evolution,” Spears explained. “In that first battle scene we worked on, there was actual fire being used on

Do current students interact with the collection?

Brett: "Oh, yes, very many. Students have used the collection for classwork as well as for recreational reading. Nearly anything—from 'Game of Thrones' swords, correspondence between publishers and showrunners, board games and even lunchboxes to the more than 1,300 copies of books in various translations—can be pulled for viewing. Interest in the collection has historically peaked when Martin is in the news or during the

Why is it important to preserve "Game of Thrones"-related memorabilia?

release of new seasons of 'Game of Thrones.'"

Brett: "George R.R. Martin is one of the most significant fantasy writers of our time. Both 'A Song of Ice and Fire' and 'Game of Thrones' bring joy, heart-

break, excitement and a sense of adventure to millions of people. If we want to understand how any cultural work can have such a powerful and long-ranging effect, we need to look at all the products of that work,

from the manuscripts that form the text, to the published works, to the merchandise based on the work. We need to preserve the totality of the work." ♦



set to interact with the stuntpeople. They attached a flamethrower to a giant motion control crane and had it spray flames where the dragon was supposed to, and it looked great. Unfortunately, at the end of that scene, when Daenerys climbs on the dragon and flies out, it was all very static because the camera didn't move around her."

In season six, Spears' team improved the dragon-riding effect. A large machine similar to a mechanical bull was built that mimicked the movements of the fictional dragon, which actress Emilia Clarke rode. The footage captured with the machine was much more dynamic, allowing Spears' team to create swooping camera motions around her and the dragon in flight.

"Season seven took it to another level," Spears added. For the first time, his team was tasked with rendering not just one person riding a dragon, but several people. To accomplish this, multiple shots of actors in movement were synchronized and composited together to attain the illusion of one harmonious movement. That commitment to problem-solving and constant evolution earned Spears and his team of artists that worked on "Game of Thrones" three Emmy awards for Outstanding Special Visual Effects in 2015, 2016 and 2018.

Chaos is a Ladder

"You know the dragons aren't real," Spears said, "and thanks to the behind-the-scenes features on

the DVDs, you know how they were made. But if the effect is done well enough, you can look past all that and still be fully engaged in what's happening." This is the biggest challenge of working on a show like "Game of Thrones": sustaining the audience's suspension of disbelief, or their willingness to accept the impossible for the sake of enjoyment.

Film editing has often been called an "invisible art" because when it's done well, it's almost unnoticeable. Cuts from one shot to another happen seamlessly in rhythm until the audience forgets the cuts are there. Spears thinks visual effects artists can benefit from measuring their work by a similar standard. "You have to get out of the way," he said. "You have to let the story play out without distracting from it. People don't go to movies to see visual effects; they go to see characters and a story. We have to support that."

In 2017, Spears left Rhythm & Hues for Pixomondo, where he is working on the upcoming Roland Emmerich-directed World War II film "Midway." In between his usual work, Spears is also exploring augmented and virtual reality technology that could change how effects are executed in the future. Instead of acting against a blank blue studio screen, for example, actors could interact with laser projections of digital characters and elements on set before those effects are finalized after the fact.

Hold the Door

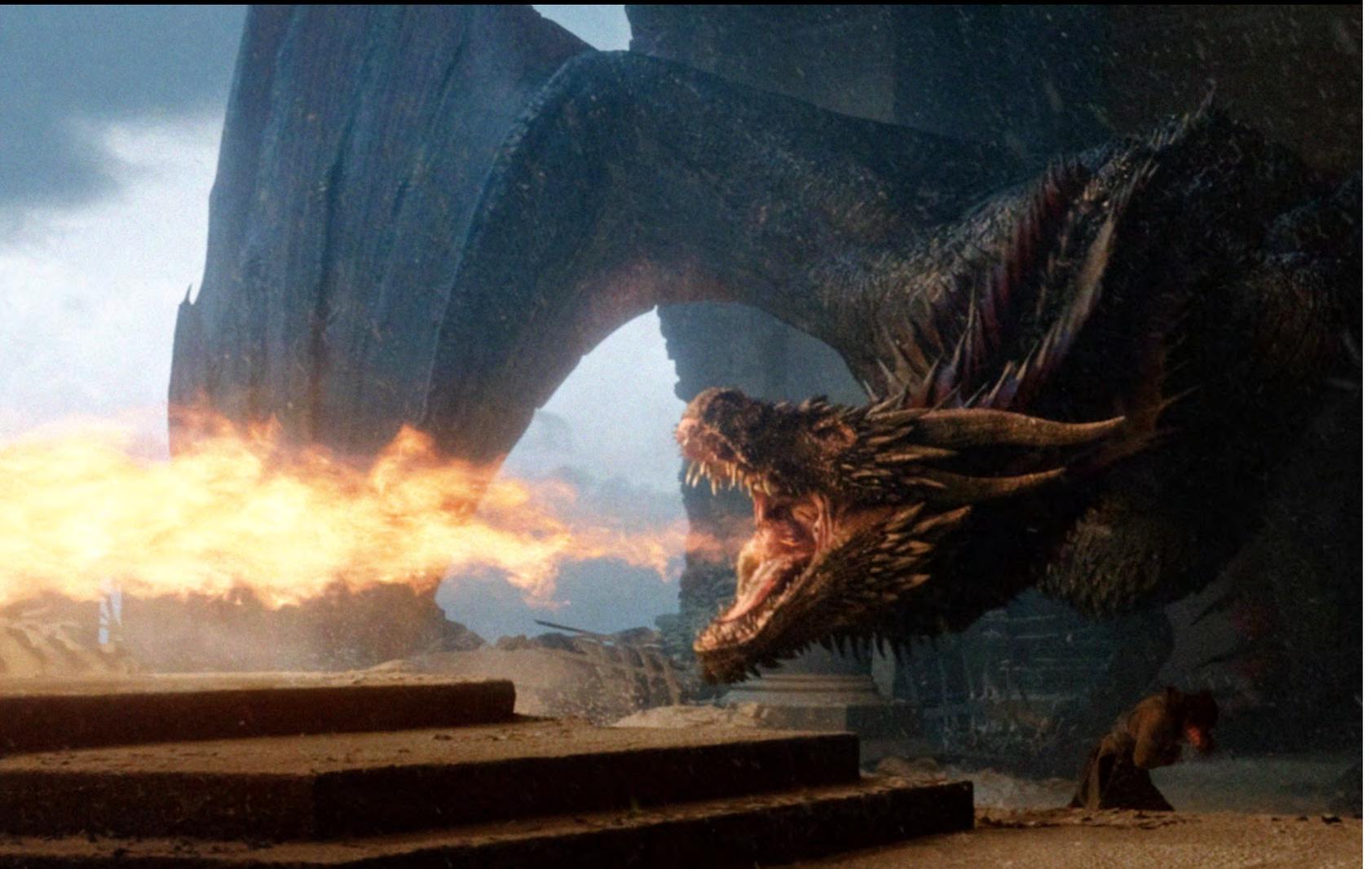
Spears never lost his homegrown affection for Texas A&M. The football team remains especially close to his heart, as he fondly recalls camping outside G. Rollie White Coliseum waiting to pull tickets to Aggie games. "One time, my friends and I camped out for tickets to the Texas game, and a photo of me made the front page of The Battalion," he remembered.

"One of the great things about Texas A&M is that there are so many opportunities as a student to look beyond your core education," he continued. "Even though the visualization program was just developing during my time at Texas A&M, I was still exposed to many different experiences, technologies and ideas." For artists and engineers alike, Spears has one lesson from Aggieland he wants to pass down. "There's a tremendous number of toys out there," he said. "Go play with them." ©

TO SUPPORT THE COLLEGE OF ARCHITECTURE OR ITS VISUALIZATION PROGRAM, CONTACT:

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ASSISTANT VICE PRESIDENT FOR DEVELOPMENT
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(800) 392-3310 OR (979) 845-0939
LZUBER@TXAMFOUNDATION.COM

*"At Texas A&M, I was exposed to many different experiences, technologies and ideas."
- Derek Spears '91*



The eighth and final season of "Game of Thrones" garnered unprecedented media attention. Approximately 19.3 million people tuned in to watch the series finale, breaking the HBO single-episode viewership record.

STERLING STEWARDS

The Texas A&M Foundation honors three couples with the 2019 Sterling C. Evans Medal award.



By Chrystal Houston.

The Texas A&M Foundation Board of Trustees has recognized three Houston couples as the 2019 recipients of its highest honor, the prestigious Sterling C. Evans Medal. Selected annually, Evans Medal recipients have a long history of supporting Texas A&M University through philanthropy, service and leadership. Honorees have supported scholarships, student development, faculty, athletic programs and academic innovation. They have also served on committees and boards that are instrumental in maintaining Texas A&M's place among the world's top public higher education institutions.



HONOREE (THE LATE):

Robert “Bob” Allen ’50

*Former Managing Partner,
Challenge Investment Partners*



HONOREE:

Judy Ley Allen

Partner, Allen Investments

Charitably Minded:

Judy Ley Allen and her late husband, Bob, have provided extraordinary leadership at Texas A&M for more than 40 years. They have provided endowed funds for a professorship, a graduate fellowship and a discretionary fund for Mays Business School. They have supported the expansion of the Wehner Building, which houses the business school, and the continued growth of the business honors program. They were also instrumental in helping complete the campus of the Bush School of Government and Public Service, honoring their dear friends George H.W. and Barbara Bush. In gratitude, the campus’ main building bears their name.

Dedicating Time and Talents:

Bob served on numerous advisory boards and councils at Texas A&M over the years, culminating in a term as a university regent (1995–2001), appointed by newly-elected governor George W. Bush. He was serving in that capacity when the Bonfire collapse occurred in 1999 and was instrumental in helping the university recover from the tragedy. Judy was an ardent supporter of Bob’s efforts at Texas A&M despite her deep family ties to Rice University, where she played a leadership role for many years on its Board of Trustees.

A Will to Work and Thrive:

Bob was a certified public accountant who began his career at IBM. At age 27, he was offered the position of CFO at a client’s company, Gulf Sulfur. Soon, Bob was made CEO of what he would build into the Fortune 500 company, Gulf Resources & Chemical

Corp. Bob served as chairman and CEO from 1960 until retiring in 1982. More recently, until his passing in 2015, he served as managing partner of Challenge Investment Partners, which is active in mining ventures in the U.S., Canada and South America.

A Successful Set Up:

Judy, one of the first women to graduate with an MBA from Harvard in 1963, started her career working for a San Francisco architectural firm. After five successful years, she decided to try something completely different and co-authored a bestselling book about wine. Two days before the launch of the book tour in Houston, a friend gave her a dinner party and set her up with “a tall, dark and handsome man,” whom Judy thought she didn’t have time for. “He picked me up for the party and by the second stoplight, I decided maybe I had more time than I thought,” she said with a laugh.

The couple wed 14 months later and lived in Houston. There, she joined her brothers in the Ley family property development business, where she still works. Her business acumen led her to leadership positions within the Texas banking industry, as she was appointed to the Branch Federal Reserve Board of Houston for six years and elected to the Federal Reserve Board of Dallas for seven years. She has served on many nonprofit boards, including the Houston Ballet, Museum of Natural Science and the Museum of Fine Arts, Houston. Additionally, Mayor Kathy Whitmire appointed her to the Houston Parks Board. Judy is also an avid supporter of FIRST Inspires, a leading promoter of STEM and robotics education for K-12 students.

“WE WANTED TO SUPPORT THE BUSH SCHOOL BECAUSE OF THE LEADERS WE KNEW THE SCHOOL WOULD PRODUCE. BOB ALWAYS ADMIRED THE CAMARADERIE AT TEXAS A&M, AS WELL AS THE ETHICS, LOYALTY AND PUBLIC SERVICE THAT ARE ENCOURAGED THERE.”

—Judy Ley Allen



A rigorous curriculum and internationally-acclaimed faculty have propelled the Bush School of Government and Public Service to rank in the top 10 percent of graduate public affairs schools in the nation. Founded in 1997, the school's programs are housed in the Robert H. and Judy Ley Allen Building. Despite the school being relatively young, Bush School graduates are already making their mark at all levels of government and the private sector.



HONOREE:

Craig Brown '75
*Founder, Chairman and CEO of
Bray International Inc.*



HONOREE:

Sue Harris Smith
Community Volunteer and Leader

“WITH ITS CULTURE OF FRIENDLINESS AND SELFLESS SERVICE, ALONG WITH THE CORE VALUES AND EXCELLENT ACADEMIC OPPORTUNITIES, TEXAS A&M TRULY GIVES STUDENTS THE BEST WELL-ROUNDED COLLEGE EDUCATION ANY YOUNG PERSON COULD EXPERIENCE.”

—Craig Brown '75

Campus Benefactors:

Craig and Sue have been generous patrons of numerous Texas A&M campus building projects, such as the Memorial Student Center (MSC), Zachry Engineering Education Complex and the John D. White '70–Robert L. Walker '58 Music Activities Center. They have also supported all STEM colleges, especially engineering and business, but perhaps their greatest impact on Texas A&M has been through student scholarships.

The couple's flagship program is the Craig and Galen Brown Foundation, which awards competitive scholarships to well-rounded, high-achieving students—primarily STEM and business majors—recognized as National Merit Finalists. During the past 28 years, the couple has personally recruited and provided scholarships to more than 400 Aggies through the Brown Scholarship Program, attracting the nation's top talent to Texas A&M. Brown Scholars include more than 40 doctors and veterinarians, 300 engineers (including more than 40 chosen as Outstanding Senior Engineers), Corps Commander and Corps Staff Officers, Student Government and MSC Presidents, Rhodes and Goldwater Scholars, and University Scholars. Brown Scholarships supplement any other academic awards students receive to provide fully-funded college scholarships. This fall, more than 140 Brown Scholars will enroll at Texas A&M.

Gifts of Time and Talents:

Craig and Sue are highly involved in recruiting Brown Scholars to Texas A&M and sharing why Aggieland is such a special place. “There are a lot of great universities in the United States, but Texas A&M's ability to combine stellar academics with a focus on developing students' people skills is unique from other institutions,” said Craig, who holds both a bachelor's degree in engineering and an MBA in accounting from

Texas A&M. In large part due to the Brown Scholarships, Texas A&M ranks No. 1 in Texas for National Merit Scholar enrollment, No. 3 among public U.S. universities and No. 7 nationally. Additionally, the Craig and Galen Brown Engineering Honors Program at Texas A&M has ranked first nationally in the number of National Merit Scholars enrolled in its freshman class the last three years and now has more than 1,800 engineering honors students enrolled. In addition to the Brown Scholar Program, Craig has given his time serving with the Engineering Advisory Council, the Engineering Honors Executive Committee and the Corps of Cadets Board of Visitors.

Heart for Healing:

Sue is involved in recruiting and interviewing Brown Scholar applicants in STEM fields, especially for Texas A&M's new EnMed program, due to her interest in medicine. She is a founding member of the Translational Research Initiative at the Houston Methodist Research Institute as well as a member of the President's Leadership Council of Houston Methodist and the Houston Methodist Capital Campaign Steering Committee. A graduate of The University of Texas at Austin and the University of Houston Law School, Sue is past president and a member of the Board of Directors of Bo's Place, a nonprofit that helps families dealing with grief. She also serves on the Board of Trustees of KIPP and holds an executive office on the Board of Directors of Brighter Bites, a nonprofit that delivers fresh food and nutrition education in school settings to disadvantaged families.

A Strong Foundation:

Craig credits much of his success to his parents, Galen and Virginia. “They were inspirational and great role models for me,” he said. He took the work ethic and life lessons learned from his parents, paired them with his education—Craig was chosen as Outstand-

ing Senior Engineer at Texas A&M—and turned them into a successful entrepreneurial career. After working a few years as a financial analyst at Exxon and U.S. president of Keystone International, Craig co-founded Bray International, a rotary valve and actuator manufacturer. Thirty-three years later, under his leadership, Bray has grown to be the largest global manufacturer of these products. It is a conglomerate of 80 companies and 3,000 employees located in more than 50 countries worldwide.

Howdy and Selfless Service:

Craig believes that traditions like “Howdy” make Texas A&M special. “It's a simple tradition, but first impressions are important,” he said, noting that the Aggie tradition of a friendly greeting and smile is invaluable in both the business world and everyday life. Membership in the Corps of Cadets was similarly formative. “The Corps emphasized that you're only as good as the weakest link on your team, and everyone must strive to be the best team member for the team's success,” he said. The important life and leadership insights acquired at Texas A&M led him to great success in life. “Most importantly, through Texas A&M, my family and my wife, Sue, I have learned that the greatest gift one can give themselves is to give to others through selfless service. Life is not what you take with you; it's what you leave behind that counts.”

At the 25th anniversary of the Brown Foundation, Craig's impact was best summed up by Andy Sanchez '13, a former Brown Scholar and Rhodes Scholar finalist. “I believe the most appropriate expression is ‘life-giving,’” he said. “It was amazing to see so many people express how thankful they were for their time at Texas A&M and for Craig's generosity in enabling their journeys.”



Former Brown Scholar Clare Elizondo '18 created the Brown Mentorship Program to pair incoming freshmen with a sophomore or junior mentor to build a sense of community among Brown Scholars. "I think our community develops us into who we become," she said. "Texas A&M shaped Mr. Brown into the successful businessman and exceptional person he is today, and he uses those qualities to positively impact the next generation of Aggies in immeasurable ways."



HONOREE (THE LATE):

James M. “Mike” Walker ’66
Co-Founder of Dril-Quip

HONOREE:

Donna Walker
Homemaker

Texas A&M Supporters:

Mike and Donna are longtime benefactors of Texas A&M, having endowed a scholarship and graduate fellowship for mechanical engineering students. However, it was their \$40 million gift in 2018 to name the departments of mechanical engineering at both Texas A&M and The University of Texas at Austin that will have the greatest impact. Their gift will help researchers at both institutions develop new technologies as well as offer additional experiential learning and leadership opportunities for students. In recognition, both universities have renamed their departments of mechanical engineering to honor Mike and his successful career in the industry.

Excellence and Innovation:

Mike was a star basketball player and the valedictorian of his high school class in Huntington. His victorious streak continued in college, as he earned a bachelor’s degree in mechanical engineering at Texas A&M and graduated first in his class. He went on to earn a master’s degree from The University of Texas on a National Science Foundation Fellowship before returning to Texas A&M for a Ph.D. During his doctoral studies, he also taught at Texas A&M. After college, he worked at Exxon as a subsea engineer. Later he worked for McEvoy, an oilfield equipment company, and Vetco Offshore before starting his own company, Dril-Quip, which specialized in offshore drilling and production equipment.

A Life Well Lived:

Mike and Donna were married for 36 years. Donna’s first husband, with whom she had three children, tragically passed away at a young age. Mike loved these children as if they were his own. He was equally devoted to Dril-Quip, which he founded with a partner in 1981. When he retired as chairman, president and CEO in 2011, the company had grown to 2,200 employees worldwide and a market cap in excess of \$4 billion. One of the highlights of his career was taking the company public on October 23, 1997, with his partners. “Mike often said he wouldn’t trade jobs with anyone in the world,” said Donna. “He had that kind of commitment to his job and company.” The couple enjoyed eight years together after Mike retired, during which time he was dedicated to his church and family.

Time for Tribute:

Mike was named a distinguished mechanical engineering graduate at Texas A&M and The University of Texas. Giving to the two universities was a lifelong desire of his. Sadly, he passed away in late 2018 shortly after making the gifts. “He told many stories about Texas A&M and his time there,” said Donna, noting how important it had been to her husband to give back. “It was one of the best times of his life, which is why he was so dedicated to making this contribution.”

“MY EXPERIENCES AT THESE TWO UNIVERSITIES CERTAINLY HELPED ME GROW AS AN ENGINEER. BUT THEY ALSO TAUGHT ME HOW TO BE A LEADER—HOW TO COLLABORATE ON BIG IDEAS, PERSEVERE THROUGH TOUGH CHALLENGES AND BOUNCE BACK FROM FAILURE.”

—The late Mike Walker ’66



Dr. Timothy Jacobs (center) serves as professor and Steve Brauer Jr. '02 Faculty Fellow in the J. Mike Walker '66 Department of Mechanical Engineering at Texas A&M University, as well as director of interdisciplinary engineering for undergraduate and graduate programs in the College of Engineering. His research concentrates on internal combustion engines, advanced and novel combustion processes, and alternative fuels. Jacobs was recently named a fellow of the American Society of Mechanical Engineers, an honor conferred upon fewer than 3 percent of members to recognize their outstanding engineering achievements.

Howwddy

Marlisa Marquez '21

Did you always want to go into the sciences?

No, because I never actually pictured myself attending college. I chose biology as my major because it was my favorite class during my senior year of high school, and my teacher was amazing. Believe it or not, I actually like organic chemistry!

Why did you choose Texas A&M University?

I decided to attend Texas A&M after learning that I had been offered several scholarships. No one in my family has ever attended college and because my mom is my sole provider, I knew I needed to go somewhere that would offer significant financial aid. Texas A&M was by far the most generous university I applied to, and it is such a great school academically. As soon as I saw my financial plan, I knew this was where I was going. My mom couldn't stop crying tears of joy. My family is proud of me, and I am very thankful because I wouldn't be here without the support I received.

What is a Science Leadership Scholar?

The Science Leadership Scholars Program is for first-generation students like me in the College of Science. As a scholar, I attend weekly meetings with other recipients and our amazing adviser, Victor Castillo. We've all become good friends and have our own study lounge in the Blocker Building. The group is very special, because it gives us a chance to participate in academic workshops and connect with other students in similar circumstances who are also trying to navigate their way through college as first-generation students.

Aiding Aggie Scientists

The Science Leadership Scholars Program was established in 2016 with the help of private gifts and accepts 20 scholars per year. One of its biggest supporters is longtime College of Science donor Thomas W. Powell '62, who gave a \$500,000 gift that was matched by the college. His donation helps provide financial and academic support to high-performing science majors in the program who share common at-risk factors, including being first-generation students from low-income families. In addition, the program targets demographic areas with high dropout rates through mentorship and social programs that focus on acclimating students to college. Students in the program are twice as likely to graduate in four years with a STEM degree when compared to students from similar backgrounds. Moreover, their participation doubles their success rate from approximately 35 percent to more than 70 percent.



Thomas W. Powell '62

Is it hard being away from your family?

Yes, especially since I have a little brother. I wish I could see more of him growing up, but I know my being here will be good for my whole family. Now, my cousins ask me about college and say they want to attend after they graduate high school. One of them even talks about becoming a nurse, and she's only a sophomore in high school. When I was a sophomore, I didn't have any aspirations about college.

What are you involved with outside of class?

I volunteer with the Texas A&M Emergency Care Team at various campus events, like football games and Breakaway. I recently passed my CPR and first-aid tests, so I am now officially certified to help in any emergency. I also work with Starlight Aggies. We go to local hospitals to hold story hours and volunteer with S.H.A.R.E. (Special Horses and Riders Excelling), which provides year-round recreational activities for special needs children in horseback riding. I love volunteering with S.H.A.R.E. because I get to interact with children, horses and dogs—my favorite things! ©

TO SUPPORT THE SCIENCE LEADERSHIP SCHOLARS PROGRAM, CONTACT:

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DIRECTOR OF DEVELOPMENT
TEXAS A&M FOUNDATION
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RLUNSFORD@TXAMFOUNDATION.COM

Give online at give.am/SLS.

Favorite thing about science:
Science can explain many things, but there are still so many unanswered questions, which leaves room for discovery. That excites me!

Favorite scientist:

Tu Youyou, a Chinese chemist who discovered treatments for malaria and aided millions with her discoveries. She was also the first Chinese woman to receive a Nobel Prize. She inspires me every day.

As a Science Leadership Scholar, first-generation student Marlisa "Marly" Marquez '21 found a home at Texas A&M University that she never thought possible.

MAJOR: BIOLOGY

HOMETOWN: RIO GRANDE CITY, TEXAS

SCHOLARSHIPS: SCIENCE LEADERSHIP
SCHOLARSHIP AND REGENTS' SCHOLARSHIP

Secret talent:
I can play the trombone, and I'm learning to play the guitar.

Most cherished childhood item:

I didn't have much growing up other than a box of school supplies that my mom bought for me and my brother in elementary school, with the directive to make it last. It's funny because that box did last for years, and my mom gave me the box to bring to College Station.

Best advice ever received:

My mom tells me to work for what I want in life. From a young age, she and her siblings worked on plantations to make ends meet after emigrating from Mexico. I want to work as hard as she did for me, and I hope that higher education can be the new norm in my family.

Weirdest Aggie tradition:

All of them! I was especially confused the first time I heard a wildcat.



Bernard Sbisa fed thousands and lived to see his name immortalized on Texas A&M's campus.

BY BAILEY PAYNE '19

Aggies have been saying Bernard Sbisa's last name wrong this whole time. It's not "suh-bee-suh," but closer to "speez-uh." Not that anyone can blame them. The man's legacy on Texas A&M's campus today mostly consists of his namesake dining hall gracing the north end of Military Walk.

If the thousands of students who shuffle through Sbisa Dining Hall today pay any thought to the building's name, they likely chalk its origin up to a generous donor or a founder of the university. Bernard was neither. He was an immigrant chef who gave selflessly to Texas A&M, filled thousands of Aggie stomachs and found a special place in students' hearts.

Bernard was born in Austria in 1843. He moved to the United States with his uncle at age 7 and spent most of his childhood in New Orleans. As a teenager, he attended a language school, where he fell in love with a Spanish-born girl named Johanna. After operating a series of hotels as a young entrepreneur, Bernard opened the Great Southern Hotel in Galveston, Texas, in 1868. He married Johanna that same year, and the couple prepared to take root in the coastal soil.

But calamity struck the Sbisas for the first time when the Great Southern burned down in June 1877, leaving them homeless. To further complicate matters, Johanna was due to deliver the couple's daughter, Rita, in October. After months of frantic job searching, Bernard found a unique opportunity at the fledgling Agri-

cultural and Mechanical College of Texas. He became the college's steward of subsistence, charged with feeding the 400 cadets housed in what were then the only two campus buildings, Old Main and the mess hall (known as Stewards Hall and later renamed Gathright Hall).

Upon arriving to campus, Bernard felt cadets weren't being fed the kind of quality meals their fees warranted. He dedicated himself to "putting the boys' money on the table" and adjusted the kitchen's standards accordingly. Before his tenure, the college spent approximately \$15 per month to feed its cadets (about \$350 adjusted for inflation). Bernard doubled the cost, delivering quality ingredients and diverse meals three times per day.

With the arrival of Sullivan "Sul" Ross as president, the college evolved past its humble beginnings. As years passed and the institution expanded, including construction of a new and bigger mess hall in 1898, Bernard and his family became living landmarks—local icons of Old Army life. Cadets came to love his commitment to his craft and Johanna's warm and consoling disposition. For those students who felt homesick in College Station, the Sbisas embodied the families they left behind.

The couple continued their work with their vetted kitchen staff, diligently producing three meals per day for up to 1,200 students at a time. They took lodgings on the second floor of the mess hall to stay close to the kitchen. Bernard prided himself on punctuality, never delivering a single meal late... until one fateful morning in 1911 when his livelihood went up in flames once again.

The fire started sometime before dawn. Bernard woke to the sound of alarms and ran out of the mess hall. While students formed bucket lines to stifle the blaze en-

gulfing his beloved building, he focused on gathering materials and finding a place to cook breakfast. He made no attempt to save any of his belongings.

As the fire neared its end, faculty members held an emergency meeting to discuss how the college's needs would be accommodated. Bernard interrupted to confidently announce that he would serve breakfast before 11 o'clock, stunning the faculty with his declaration. Shortly thereafter, he and his staff dug ditches and collected wood for fires. They gathered stray pots and utensils, borrowed kitchenware that was intended for military camping exercises and began cooking in the open air. Breakfast was served at 10:30 a.m., picnic style. It was the only meal Bernard served late.

After the last embers of the mess hall fire died out, the college faculty elected to break for winter holiday early while they began planning temporary accommodations and a permanent replacement. Construction on the new dining hall began soon after with the words "Bernard Sbisa Hall" cut into its cornerstone.

Johanna succumbed to a heart attack in 1919. Bernard continued serving the college until he passed away while visiting his daughter in Havana, Cuba, in 1928. He had invested his heart, soul and last 50 years to providing the best meals he could muster for what he once called "the finest set of young men in the world," the Corps of Cadets.

When workers finished Sbisa Dining Hall in 1913, it was considered the "largest unobstructed dining room in the world." It may not carry that claim today, but it still bears the recognizable name of a man whose pure, unfettered passion to do his job and do it right earned him the respect of all whom he served. ©





Sbisa's

BERNARD AND JOHANNA SBISA STANDING OUTSIDE THE MESS HALL THAT WAS BUILT IN 1898 AFTER GATHRIGHT HALL BECAME TOO SMALL TO ACCOMMODATE CADETS. THE BUILDING BURNED DOWN IN 1911 DUE TO A KITCHEN FIRE.

Teaching and learning will be reimagined in the Texas A&M College of Dentistry's new Clinic and Education Building, which is set to open for patient care in January 2020.

Hello, Dallas!

With a newly constructed, nine-story clinical building on the outskirts of downtown, the Texas A&M College of Dentistry will not only expand its educational and service reach across North Texas, but will also boldly announce the university's presence in Big D.

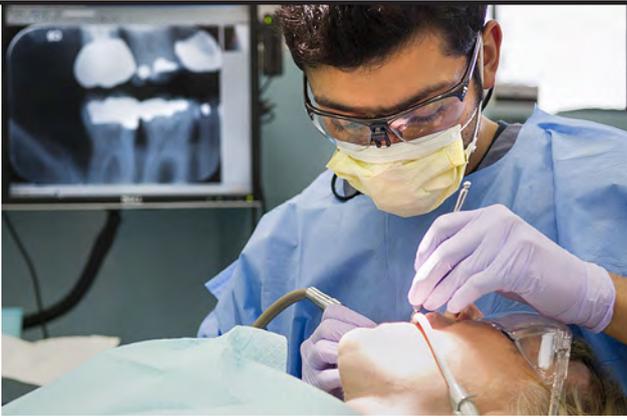
BY KARA BOUNDS SOCOL

Roughly one-third of the state's dental practitioners have graduated from the Texas A&M College of Dentistry. It is one of only two dental colleges in the nation offering training in all nine oral health specializations. Each year, dental school student practitioners engage in more than 100,000 visits with patients—many of whom are from low-income, underserved communities—for a fraction of the price of a private prac-

tice visit. This makes the college the largest single provider of oral health care in the Dallas-Fort Worth area.

If you didn't know that Texas A&M University even had a dental school, however, you're not alone: Even Aggies who have lived in Dallas for years are often unaware of their alma mater's presence just a mile east of downtown. But that's all about to change.





The end of 2019 will mark the beginning of an era for the dental college—one that reflects a “whole health” educational focus, which prioritizes team- and technology-driven methods to patient care over traditional siloed approaches. Going hand-in-hand with the innovative curriculum will be a state-of-the-art, nine-story Clinic and Education Building with the Texas A&M logo that will greet drivers as they approach the rapidly growing Baylor University Medical Center.

“This new building is positioned to be a gateway to the area from downtown and will give Texas A&M a huge presence in the medical center,” said Dr. Steve Griffin, the dental college’s associate dean for clinical affairs. “It’s designed for the kind of patient-centered care that will attract new patients and provide a better level of comfort for our existing patients.”

Dr. Lawrence Wolinsky, dean of the dental college, said the new clinical space will also enable the college to increase its current enrollment of about 600 students by 25 percent. With a critical shortage of dental health professionals that is only predicted to worsen, Texas is in dire need of these graduates. “Without Texas A&M, the tremendous statewide need for dental care would go unmet,” he said. “It simply can’t be accommodated by those already practicing.”

A Curriculum-Driven Design

Health care in the United States has traditionally revolved around treating specific ailments as they emerge. But that mindset is evolving to one of “whole health”—a big picture way of thinking that involves looking not just at one health variable, but at all the variables that ultimately impact an

individual’s well-being. At the dental college, for instance, faculty members are teaching students to not only recommend a treatment plan for each patient, but to also do so with the input of the patient’s other health care providers.

Plans for the college’s new building mirror this modern mindset, Wolinsky said. In developing the space, planners were careful to fit the design to the curriculum—not the other way around.

Wolinsky explained that the current facility’s primary clinical space hasn’t seen an expansion for several decades. It is full of small operatories (treatment areas) that can accommodate only two to three people, and patients move from room to room based on the various dental specialists they need to see.

The new design, however, puts the patient’s whole health—and comfort—at the forefront. Large, open operatories accommodate not just the patient and a single practitioner, but rather the patient and their health care team. This means that a patient may be seen by two different dental specialists in one treatment area, or it might mean that the patient interacts with a dental specialist and a social worker, while a health care provider from a completely separate medical field provides input via virtual technology.

“In treating the whole patient rather than just looking at his or her individual oral health needs, students are focused on outcomes rather than just procedures,” Wolinsky said of this interprofessional, team-driven health care approach. “What we’re trying to create is an environment where dental students will learn that care needs to be considered and provided in a team setting.” ©

Texas A&M College of Dentistry Facts

- The Texas A&M College of Dentistry was created in 1905 and was affiliated with Baylor University from 1918 to 1971.
- The school joined The Texas A&M University System in 1996, but retained its Baylor College of Dentistry name until 2016.
- Students from underrepresented minority groups make up 37 percent of the college’s student body, which closely reflects the state’s population.
- Along with seeing patients at the college, students treat thousands of area residents in community clinics, hospitals, nursing homes and jails under faculty supervision. They also present oral health education at local schools and offer oral screenings at health fairs.

You can support the Texas A&M footprint and dental outreach in North Texas with a gift for the new Clinic and Education Building, which is slated for completion in December 2019. Naming opportunities begin at \$25,000 and are available for areas such as operatories, classrooms and wings. Naming rights for the building are available for a \$5 million gift, while other endowed gifts are needed to support dental students and faculty.

TO LEARN MORE, CONTACT:

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Among the thousands of faculty and staff employed by Texas A&M University, there is no shortage of fearless leaders, bright minds and inspiring mentors. These members of the Aggie community invest their time and talent in Aggie students every day. They are the university's greatest advocates, actively promoting its values and culture, supporting its mission and making Texas A&M a force for good in the world.

It's no surprise that many of these individuals are invested personally and financially in the university's future. In fact, more than 8,000 current, former and retired Texas A&M faculty and staff have given more than \$62.5 million to the *Lead by Example* campaign, a \$4 billion fundraising effort for the university that stands at \$3.57 billion raised as of June 30. While their gifts support many individualized passions, they all share a common purpose in shaping the course of Texas A&M.

The Colonel

Col. Glenn Starnes '81, USMC (Ret.)

ASSISTANT COMMANDANT, OPERATIONS & TRAINING

Like many who enter the armed forces, retired Marine Col. Glenn Starnes '81 had no intention of staying in the military long after he was commissioned in 1981. He had just graduated from Texas A&M and planned to spend four or five years in the Marine Corps before returning to civilian life to pursue a career in law enforcement. "Once I got in, though, I thought, 'Well, I'll stay until I'm not having fun, or until they kick me out!'" he said.

In his 30 years of service, Starnes served two tours of duty in Iraq, commanding the 1st Battalion, 10th Marine Artillery Regiment at the Battle of Nasiriyah in 2003 and deploying again to Fallujah in 2005. His more than one dozen awards and decorations include the Legion of Merit, Bronze Star and Officer of the Order of the British Empire, conferred upon him by the Queen of England. When he retired in August 2011, he returned to College Station and took his current job a year later as assistant commandant for operations and training in the Corps of Cadets.

Before his first deployment, Starnes created a planned gift in his will to establish an endowed Corps scholarship. After he assumed his current position, he was inspired to establish another scholarship in honor of his late parents for cadets studying history or political science. "I named it after my parents because they supported me," Starnes said. "They put me through school, so why shouldn't I help another student in return?"

It's Their Texas A&M

Meet six faculty and staff members who are shaping the university they call home.



“Growing up, my family believed in philanthropy, and I’ve tried to adhere to that. I’ve had so many opportunities in life, and I’ve been very lucky to receive the education that I did. It’s incumbent on me to give back.”

The Chemist

Dr. Carol Fierke

PROVOST & EXECUTIVE VICE PRESIDENT
PROFESSOR OF CHEMISTRY AND BIOCHEMISTRY

In 2017, Dr. Carol Fierke was named provost and executive vice president of Texas A&M. In her role, she oversees 16 colleges and schools, two special purpose campuses, the university libraries and academic affairs. Some of her goals include enhancing the student undergraduate experience and the upward trajectory in research excellence by supporting and diversifying faculty.

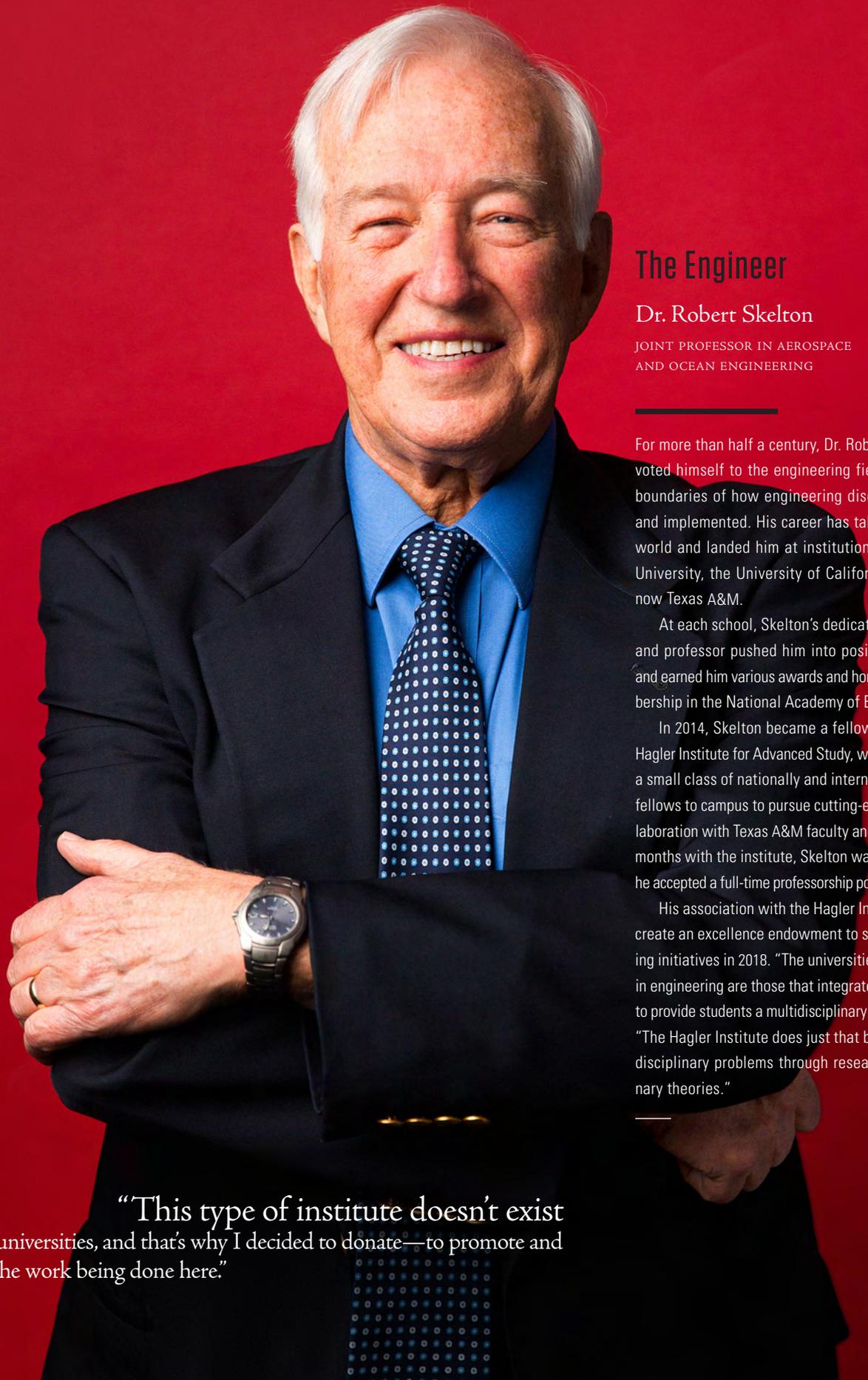
In addition to her position as provost, Fierke continues her own research as a professor of chemistry, biochemistry and biophysics. Her integrated position as both an administrative leader and faculty member gives her a better understanding of unmet needs across campus.

To help reward faculty excellence, Fierke created the Texas A&M University Honorific Fund, which is currently

used to partially fund university professorships. “I believe faculty are the backbone of the university,” she said. “I wanted to set up a fund that would reward faculty who are exceptional at research, teaching and service.”

The fund supports faculty across all disciplines. The ideal candidate has achieved international and national recognition and made a profound impact through their innovative scholarship and teaching. The award also highlights recipients’ commitment to inclusivity and service. Fierke hopes that her gift will serve as a guiding light for all faculty and encourage others to strive for their full potential.





The Engineer

Dr. Robert Skelton

JOINT PROFESSOR IN AEROSPACE
AND OCEAN ENGINEERING

For more than half a century, Dr. Robert Skelton has devoted himself to the engineering field and pushed the boundaries of how engineering disciplines are taught and implemented. His career has taken him around the world and landed him at institutions including Purdue University, the University of California San Diego and now Texas A&M.

At each school, Skelton's dedication as a researcher and professor pushed him into positions of leadership and earned him various awards and honors, including membership in the National Academy of Engineering in 2012.

In 2014, Skelton became a fellow of the Texas A&M Hagler Institute for Advanced Study, which annually invites a small class of nationally and internationally prominent fellows to campus to pursue cutting-edge research in collaboration with Texas A&M faculty and students. After six months with the institute, Skelton was so impressed that he accepted a full-time professorship position at Texas A&M.

His association with the Hagler Institute drove him to create an excellence endowment to support its engineering initiatives in 2018. "The universities that lead the way in engineering are those that integrate various disciplines to provide students a multidisciplinary education," he said. "The Hagler Institute does just that by addressing multidisciplinary problems through research in interdisciplinary theories."

"This type of institute doesn't exist at other universities, and that's why I decided to donate—to promote and expand the work being done here."

The Author

Dr. Junuthula N. Reddy

HOLDER OF THE OSCAR S. WYATT JR. ENDOWED
CHAIR IN MECHANICAL ENGINEERING

Lining the walls of Dr. J.N. Reddy's office are books, awards and mementos from his home in India that tell the story of his accomplishments since earning his master's degree from Oklahoma State University (OSU). It was there that he began writing computer programs to complete his coursework in addition to doing assignments by hand, impressing his professors and eventually leading him to his area of expertise, computational engineering science.

"My future was a bit uncertain as I made the move from India to the U.S., but I was excited to find computers at OSU," Reddy said. "Since then, my research has focused on developing theories and computational models that others can use to extend and advance their own research." Known as the Reddy layerwise theory and the Reddy third-order plate theory, the models he developed have been included in Abaqus, a software that is used in the creation of virtually every structure, including automobiles, aircrafts and even medical prosthetics.

In 1992, Reddy accepted the Oscar S. Wyatt Jr. Endowed Chair in Mechanical Engineering to join the Texas A&M faculty. "I'm very grateful to have utilized funds from this chair to support many educational, research and professional activities for myself and my students," he said. "Texas A&M

has enabled my two passions: teaching and research, both of which involve students, who are the most precious thing we have at this university."

He has authored more than 700 papers and published 21 books, which are renowned for their clear language and figures, drawn by Reddy himself. He has also won the highest awards from professional organizations across his field. In hopes of continuing his legacy of research and serving students, he established a graduate fellowship and an endowed chair in applied mechanics at Texas A&M.

"Any measure of success must include giving back to the community," he said. "As the chair I hold has contributed to my accomplishments, I hope that the chair I funded will also help faculty members do great things at Texas A&M."





The Innovator

William "Bill" Peel Jr. '74

EXECUTIVE DIRECTOR OF INNOVATION & STRATEGIC PLANNING AT MAYS BUSINESS SCHOOL

For William "Bill" Peel Jr. '74, visiting Aggieland was love at first sight. Peel grew up in Memphis, Tennessee, and had only traveled west of the Mississippi River once before coming to campus. "When we drove down the main drive leading up to the Jack K. Williams building, I told my mom I loved it," he said.

He enrolled in the College of Architecture, joined the Corps of Cadets and became engrossed in Texas A&M traditions. During his sophomore year, however, Peel's studies were tragically interrupted when he received a call informing him that his father had died in a military plane crash. Reeling from the news, Peel's professors advised him to return to Memphis instead of taking his finals. "Go home and take care of your family," they told him. "Texas A&M will be here when you get back." Peel did return to Texas A&M, where he was allowed to make up his exams and graduate on schedule in 1974.

Peel enjoyed a successful career in architecture and is now the executive director of innovation and strategic planning at Mays Business School. He never forgot the generosity of the Aggie family during his time of need and has given to the College of Architecture in return. His contributions include a college excellence fund in his will and support for the Rodney Hill Professorship in Creativity and Design. "I could never completely repay my Aggie family for what they've given me," he said. "I've made up my mind to reinvest whatever I can into Texas A&M."





“When I was a student, I received financial assistance. Being an older student was hard enough as it was without the financial burden. I know firsthand how gifts like this can make a difference to one person, and I really hope my gift will allow our program to grow.”

The Educator

Tracy Glass '14

PATHS PROGRAM DIRECTOR,
COLLEGE OF EDUCATION AND HUMAN
DEVELOPMENT

When Tracy Glass '14 first expressed interest in teaching as a teenager, her high school counselor discouraged her from pursuing it as a profession. Consequently, she went on to work in the field of drafting for 18 years. Despite her success, she always knew that something was missing, and at the age of 40, she decided to return to school.

After receiving her bachelor's degree in interdisciplinary studies with a concentration in special education, Glass became involved with the Postsecondary Access and Training in Human Services (PATHS) certificate program in the College of Education and Human Development, where she now serves as its program director. PATHS prepares students with disabilities for jobs in education, child care or elder care fields.

PATHS students work toward a certificate, which prepares them to assist others with disabilities. “When I look at our students, I don't see a disability,” explained Glass. “A disability is only a part of who they are. Our students learn a little differently, but don't we all?”

Glass has watched the program transform lives: Students with disabilities complete the PATHS program as entirely different individuals with a newfound sense of independence and confidence. Inspired to give back, she created a scholarship in her estate for students in PATHS.

Leaders are made here.



Three ways to give. Three ways to lead.



The Association of Former Students raises the university's Annual Fund, which supports both current and former student activities, academics and traditions.

aggienetwork.com



The Texas A&M Foundation builds a brighter future for Texas A&M University, one relationship at a time, by uniting generosity and vision to raise and manage endowed gifts.

txamfoundation.com



The 12th Man Foundation funds scholarships, programs and facilities in support of championship athletics.

12thmanfoundation.com

LEAD *by* EXAMPLE

The Lead by Example campaign is a \$4 billion fundraising effort for Texas A&M University. | leadbyexample.tamu.edu

ILLUSTRATION: Amanda Newton (c.1860–1943), the granddaughter of Isaac Newton, was a botanical illustrator for the U.S. Department of Agriculture who specialized in watercolors of fruit, principally apples, of which there are hundreds of examples.

when you visited me in college for the first time
you convinced me that i wanted some groceries
probably because we needed to spend time together
probably because it was the least you could do
to serve me in the short weekend we had
to make up for all this time i'd been away.
i said, sure, i could really use some apples, and
you jumped like you had done many times before
at the chance to give me everything you could
which meant that selecting seven apples
became an extravagant reviewing process
of picking the perfect fruit for your daughter
to tell her how much you missed her.

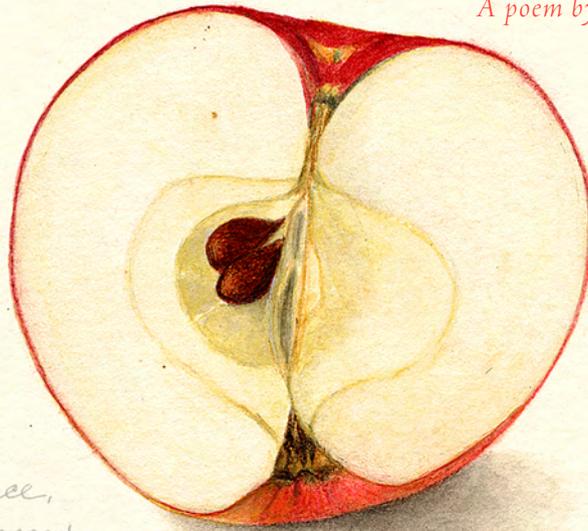
*This one has a bruise, and also,
I wish I could make dinner for you after school.
Do you see? It's not as red as it could be.
Do you see? I'm even missing your dirty laundry.*

dad, i wish i had the courage to tell you
that the way you seized every apple
spun it around
stared at it with inquisitive eyes
squeezed it between questioning fingers
told me more about your love than the words you didn't say.



“Apples”

A poem by Courtney Kiolbassa '18



40064
“Anisim”
H. J. Eustace,
L. G. Clemons,
Storm Lake,
Buena Vista Co.
Iowa

A. A. Newton
Dec. 13-07
Apr. 1-08



BEHIND THE POEM

Courtney Kiolbassa '18 wrote the poem “Apples” when she was a sophomore in college after her parents came to visit her for the weekend. Her mother immediately gathered up her dirty laundry, while her dad hopped in the car to buy her groceries. “I realized all the small ways my incredible parents showed their love for me, even

though I sometimes forgot to call them or was too busy to drive home,” said Kiolbassa. “I started to see that love looks different for each person.”

While a student at Texas A&M, Kiolbassa was a National Merit Scholar, an inaugural Haynes Scholar, and the recipient of the Mary Pat and Michael J. Bolner '73 President's Endowed Scholarship. An English graduate, she has

always believed in the power of storytelling and currently works in Dallas as a copywriter for Sherwood Fellows.

Her poetry aims to magnify single moments and experiences, a technique her elementary teacher called “explode-a-moment.” She searches for the hidden depths in ordinary, everyday interactions to make them extraordinary. In addition to poetry, Kiolbassa writes

fiction and nonfiction and has an emerging interest in radio storytelling.

“Apples” was first published in The Eckleburg Project, the official undergraduate literary journal of Texas A&M. Managed by students, the journal features prose, poetry, visual art and photography from talented Aggies across campus, regardless of their major or discipline. ©

finalreview

When midterms and finals roll around, stacks of pennies, assorted bills and even gift cards can be found at the feet of Lawrence Sullivan “Sul” Ross, the former president of the Agricultural and Mechanical College of Texas (1891–98) who stands in Academic Plaza as the oldest statue on campus.

Stemming from Sully’s famous response of “a penny for your thoughts” when students asked how they could

repay him for his help on homework, the tradition of placing pennies at his feet for good luck on exams now gives current students an avenue to create a culture of philanthropy on campus.

Under the Sul Ross Penny Act established in 2011, student organizations can apply to receive funds from the pennies through the Student Government Association. The 12th Can, a student-run, on-campus food pantry, has

collected the pennies since 2017 to purchase food for Aggie students, faculty and staff in need of assistance.

“Our organization operates solely on donations, so the pennies are a huge help,” said Megan Ford ’19, director of 12th Can. “It’s wonderful that such a long-standing Texas A&M tradition is being used today for charitable purposes to support Aggies in need.”

