# GOLD PAN

**ALUMNI MAGAZINE · SUMMER 2025 NMT LEGACIES** NEW MEXICO TECH SCIENCE • ENGINEERING • RESEARCH UNIVERSITY



# **2025 HONOREES**



### BORDEN PUTNAM DISTINGUISHED ALUM IN SCIENCE & TECHNOLOGY

Borden Putnam '75 – Recognized for a 45-year career in geology, mineral exploration, and investment strategy. His leadership roles at Eastbourne Capital, Robertson Stephens, Newmont, and AMAX, combined with invaluable service on the NMT Foundation Board and generous philanthropy, have shaped opportunities for students and strengthened the university's future.



## WARNER WILLIAMS DISTINGUISHED ALUM IN ENGINEERING

Warner Williams '74 – Honored for four decades of excellence in petroleum engineering, culminating as Vice President of Chevron North America Exploration and Production. Warner's industry leadership, creation of student scholarships, and guidance on the Petroleum Engineering Advisory Board reflect his enduring commitment to Tech and the profession.



### **HOPE CAHILL**

YOUNG ALUM SERVICE AWARD

Hope Cahill '20 - Celebrated for her dedication as a science educator at El Dorado Community School, where she has made STEM engaging, accessible, and inspiring for countless students. Her commitment to empowering the next generation exemplifies the profound impact of early-career service.



### DRS. JEAN EILEK AND FRAZER OWEN

PRESIDENT'S MEDAL

Drs. Jean Eilek and Frazer Owen are honored for decades of service, leadership, and philanthropy benefiting NMT, the Socorro community, and astrophysics worldwide. Jean, the first female Physics Department professor, has mentored countless students and serves as Professor Emerita. Frazer's distinguished NRAO career strengthened NMT's global astrophysics ties. Together, they have funded scholarships, advanced programs, and supported causes from local to national, leaving a lasting legacy.

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### **2025 COMMENCEMENT**

On May 17, 2025, nearly 250 students crossed the stage at the Socorro Rodeo and Sports Complex, earning their degrees from New Mexico Tech. The event had over 1,500 attendees and included undergraduate, master's, and Ph.D. graduates from across New Mexico, 18 U.S. states, and 10 countries.

Highlights included a powerful national anthem by Val Thomas, a heartfelt student address from Bishop Cervantes, and recognition of top students with prestigious awards like the Brown Medal and Founders Award. Dr. Caitano da Silva was honored with the Distinguished Teaching Award.

More than 370 students graduated in the class of 2025. Average undergraduate GPA was 3.40. Mechanical Engineering was the most awarded undergraduate degree (45), Science for Teachers topped the master's degrees (23), and Petroleum Engineering led the Ph.D. level (6).





A proud graduate honors her heritage by wearing traditional regalia, a powerful reflection of culture, identity, and achievement.



Techie pride on full display as graduates in hard hats cheer on their fellow classmates, celebrating the spirit and solidarity that define the NMT experience.



Ph.D. tradition with a bang—New Mexico Tech's signature "explosive art" diplomas are as bold and innovative as the minds that earned them.





### NMT NEWS HIGHLIGHT

### **2025 NMT SME FELLOWS**

The Society for Mining, Metallurgy & Exploration (SME) has published its 2025 list of Fellow Awardees. Candidates for the SME Fellow Award must have been a full member of SME for at least 15 years, and must have demonstrated significant and sustained contributions to the minerals industry and to SME.

### 2025 NEW MEXICO TECH SME FELLOWS INCLUDE:

Dr. Corale Brierley (1968 B.S., Biology and 1972 M.S., Chemistry)

Dr. James Brierley (NMT Biology Professor, 1965 to 1982)

Dr. Virginia McLemore (1977 B.S. and 1980 M.S., Geology)







Dr. Virginia McLemore

### PRESIDENT AMOUZEGAR RESIGNS; TEMPORARY LEADERSHIP ANNOUNCED

On June 30, 2025, New Mexico Tech President Mahyar Amouzegar submitted a letter of resignation to the NMT Board of Regents. On July 24, 2025, New Mexico Tech announced the temporary leadership structure following the recent resignation of Dr. Mahyar Amouzegar. This structure is designed to ensure seamless university operations and maintain a strong focus on the institution's academic and research missions.

Provost and Vice President of Academic Affairs Dr. Michael Jackson will serve as Acting President, effective July 28, 2025. Additionally, Dr. Lique Coolen, current Vice President of Research, will also temporarily assume the roles of Provost and Vice President of Academic Affairs, effective August 1, 2025.

"I am honored to serve New Mexico Tech during this transitional period," said Acting President Jackson. "I want to extend my sincere gratitude to Dr. Amouzegar for his mentorship and dedicated service to our university and the Socorro community. His strategic vision has been a great asset."

Acting President Jackson expressed confidence in the university's future, citing its dedicated faculty and



staff as its greatest strength in delivering a world-class STEM education to students.

"While leadership transitions bring challenges, our core mission is unwavering," Jackson stated. "We remain fully committed to providing a world-class STEM education for our students and advancing research that benefits our state and nation. I am confident that by working together, our exceptional team will continue to thrive."



### NMT NEWS BRIEFS



### **MARCH 2025**

New Mexico Tech's Miner Mayhem electrified the campus March 28, 2025, proving that robotics tournaments are less about winners and losers, and more about the thrill of creation and the testing of prototypes. Nearly 300 students from grades 6-12, plus their coaches, parents and friends, came from all over New Mexico. Miner Mayhem and its NMT Mechanical Engineering outreach program, which began supporting just three high schools with at-home robotics projects in the spring of 2020, has experienced explosive growth. It now supports more than 50 schools in the 2024-25 academic year, a testament to its impact, providing limited robotics kits, educational content, teacher training, and crucial NMT student technical support and mentorship.





#### **APRIL 2025**

The 73rd annual New Mexico State Science and Engineering Fair was held at New Mexico Tech on April 12th with more than 250 student competitors and nearly 75 judges. Students with the best projects went on to represent New Mexico at the prestigious Intel International Science and Engineering Fair (ISEF) held each May.



MAY 2025

Commencement (see page 4)

### **NMT NEWS BRIEFS**

#### **JUNE 2025**

New Mexico Tech's LunaMiners team (photo, right) showcased their exceptional engineering capabilities by sweeping the CoSMiC Collegiate Space Mining Competition held at Iowa State University. The three-day competition challenged teams to design and build autonomous robots capable of lunar construction tasks, specifically excavating and stacking lunar regolith to create berms. The NMT LunaMiners arrived in Iowa fresh off a national first-place finish in the NASA MINDS Competition, eager to continue their success. Their robot had two attempts in the arena and a systems engineering design review—all important feedback to improve the bot. The LunaMiners awards included Innovation (Design Presentation to Caterpillar): 1st Place; Construction (Biggest Berm Created): 1st Place; Most Insane Driving: 1st Place; Overall Points: 1st Place.

Project Innerspace released "The Future of Geothermal in New Mexico," in conjunction with New Mexico Tech and the New Mexico Bureau of Geology and Mineral Resources. This important report details New Mexico's unique advantages that may drive a "geothermal boom" in the near future.





Power Rangers Ashton deGraaf, Mentor Suraj Ghimire, and Williams Utaman

The New Mexico Tech "Power Rangers," a two-person team of an engineering and a management student, slayed the regional competition for the Department of Energy's prestigious award, the EnergyTech University Prize. The visionary technology that the Power Rangers pitched is "a safe and efficient thorium-based molten salt reactor system, designed with increased fuel efficiency for grids, industries, and remote sites," according to the DOE release. The team—Williams Utaman (graduate student in petroleum engineering) and Ashton DeGraaf (senior in management)—are now one of 24 national finalists (out of 188 initial teams). Their mentor is Assistant Teaching Professor of Management Suraj Ghimire.

ConocoPhillips is expanding its commitment to workforce development in New Mexico's energy regulation sector with a \$260,000 investment in New Mexico Tech's Fueling Tomorrow's Pipeline Scholarship program. Launched in 2022 with an initial gift of \$60,000, the scholarship is a unique partnership between NMT, the New Mexico Oil Conservation Division (OCD), and private industry, designed to build a dedicated pipeline of skilled talent for the Division. The program provides top NMT students with hands-on regulatory experience through year-long, paid internships with the OCD, offering a direct pathway into public service roles critical to the state's energy oversight. Following the program's early success, ExxonMobil joined the initiative with a \$40,000 contribution, allowing more students to benefit from this opportunity.



### THE ROVING MINE

By Bill Hawes (B.S. 1960, Mining Engineering)



Larry Dykers in front of diorama

About twenty years ago, Dr. Jan Rasmussen, the curator of the Arizona State Mining and Minerals Museum in Phoenix, expressed the desire to have an interactive display of an open pit copper



Tom Scartaccini, Bill Hawes, and Larry Dykers

mine in the museum. A donor was found who stipulated that the exhibit be credited to the Mining and Minerals Education Foundation, not the individual making the donation.

The exhibit was completed by 2010 and featured an HO-scale (1:87) model of a typical open pit copper mine, along with a mill, SX-EW (solvent extraction-electrowinning) plant, and a smelter. It occupied the mezzanine of the building and was a popular addition to the world class minerals display.

After about a year, Jan Brewer, Governor of Arizona at that time, and the state legislature transferred operation of the museum from the Arizona Department of Mines and Mineral Resources to the Arizona Historical Society. Very shortly after, Governor Brewer announced plans to convert the museum from a mining and minerals museum to one celebrating Arizona's centennial of statehood, with exhibits of Arizona's "5-C's" (Copper, Cattle, Cotton, Citrus, and Climate). The architect who had been employed had no use for the open pit and its infrastructure display-as far as the Historical Society's plans, it was trash.

The Foundation found a temporary place for the exhibit at a technical school in nearby Mesa where the builder of the diorama, Bryan Beaulieu, taught. It resided there for over a year until the school needed the space for other purposes. A new location was found at the Arizona Historical Society's Museum in Tempe.



Russell Hewlett, Tom Scartaccini, Phil Stewart, and Bob Walish



**Opening day at Bullion Plaza** 

It should be noted that each move required reconfiguring the display to fit in the available space. The original space occupied by the diorama was 48' long by 14' high. The final reconfigured space is 27.5' long by 11' high (reconfiguration is necessary so benches and roads match up with no dropoffs or cliffs.) Thus, Larry Dykers (B.S. 1960, Mining Engineering and the actual donor for the exhibit), spent considerable time doing the reconfiguration, or supervising if volunteers were available, for the move to the Tempe museum. Also, since Dykers lives at the north end of Tucson, he spent three hours minimum traveling to/from Tempe, depending on traffic. After a couple years at the Tempe site, the Historical Society decided to change exhibits, so another (hopefully permanent) site had to be found. As with the first relocation, time was of the essencethe diorama had to be gone in a short time. Finding a suitable site proved to be difficult, as sites near mining areas or popular tourist attractions were taken.

### THE ROVING MINE



Right side of diorama



Working on the diorama

Since I am familiar with most of the mining museums and displays in Arizona, I suggested the Bullion Plaza Cultural Center and Museum in Miami, Arizona. This facility had room but was off the "beaten path." Miami is a historic mining district and site of many mining achievements, but is not convenient to Arizona's tourist attractions.

Tom Foster, curator of the Bullion Plaza Museum, was happy to have the exhibit and thus started a two-year odyssey in relocating this exhibit. Previously moves had been made with most of the labor provided by either mining companies or museums. This time there was no such source, beyond moving the pieces of the exhibit from Tempe to Miami courtesy of Capstone Mining Company (operator of the Pinto Valley Mine).

Thus a two-year adventure for classmates Larry Dykers and Tom Scartaccini (B.S. 1961, Mining Engineering) and friend Russell Hewlett (plus any available volunteers) started. All three live in Tucson, at least a two-hour drive to Miami. Contributing further to the time required for reassembling the diorama was highway construction taking place between Superior and Miami, often involving lengthy detours or delays for one-way traffic. Occasionally, the museum had events scheduled that interfered with the diorama assembly. Another significant source of delays was the lack of availability of materials for assembling the diorama. The Globe-Miami area is fairly small, rendering it difficult to purchase needed materials normally found in hobby or hardware stores. Consequently, many items had to be purchased in Tucson for use in the following weeks.

After many trips to/from Miami/Tucson, the diorama was finally completed in late 2023, with the grand opening on January 13, 2024. Minor fine tuning is still going on, but Larry and Tom can sit back and bask in the accomplishment.

For anyone traveling in the area (US Highway 60 & 70), take the time to stop at the Bullion Plaza Cultural Center and Museum and admire the work of some dedicated volunteers (Jan Rasmussen, Bryan Beaulieu, Russell Hewlett, museum docents Robert Walish, Pilar Carbajal, and Tom Meridith, various others), and the two dedicated NMT alumni, Larry Dykers and Tom Scartaccini.

To support New Mexico Tech, make an online gift today by scanning the QR code.

Or go to

https://nmt.edu/advancement/giving.php



### **ALUMNI RECEPTIONS AND EVENTS**

### September

18-19 - The 2025 Dan López President's Golf Tournament

23 - Socorro, NM, Career Fair Panel, Workman 101

**25** – Farmington, NM, Quarters Restaurant & Smoke House

26 - Roswell, NM, Pecos Flavors Winery & Bistro

#### October

2 – Minneapolis, MN, AISES Conference, The News Room

16-19 - Socorro, NM, 49ers

20 - Houston, TX, SPE Conference, The Rustic

**26** – Reno, NV, Geothermal Rising Conference, location TBD

### **November**

1 - Corrales, NM, with Frank Etscorn at Ex Novo

18 – Socorro, NM, NM Energy Institute Symposium

19 - St. Louis, MO, SC Conference Series, location TBD

### **December**

6 - Phoenix, AZ, location TBD

### Check for updates on our website:

https://www.nmt.edu/advancement/alumni\_receptions.php





2024 London reception



2025 Denver reception

# GOLD PAN TRANSITIONS TO AN ANNUAL SCHEDULE

We want to inform our readers that starting in 2026 the New Mexico Tech Gold Pan alumni magazine will transition to an annual publication schedule. While we have thoroughly enjoyed bringing you fresh content twice a year, we believe this will allow us to dedicate more time and resources to creating even richer, more comprehensive issues. Our commitment to delivering high-quality features and captivating visuals remains unchanged, and we're excited for the opportunity to make each annual edition even more special. Thank you for your continuing engagement with New Mexico Tech, and we look forward to sharing our next issue with you in Summer 2026!

### THE ENDURING LEGACIES OF NEW MEXICO TECH

By Colleen Foster, Executive Director, New Mexico Tech Foundation

New Mexico Institute of Mining and Technology stands as more than just an institution of higher learning—it represents a tapestry of interconnected legacies that have shaped generations of students, families, and the broader scientific community.

### **Family Legacies**

Perhaps nowhere is the enduring appeal of New Mexico Tech more evident than in the many families who have made the university a multi-generational tradition. Family legacies at Tech often begin with a single student who discovers something special about the institution—the closeknit community, the hands-on approach to learning, or the opportunities for undergraduate research that are typically reserved for graduate students elsewhere. The impact of these family traditions extends beyond mere attendance statistics. It contributes to a sense of institutional continuity and stability that helps preserve Tech's distinctive culture while also facilitating its evolution. Alumni parents and grandparents become informal ambassadors for the institution, sharing not just their academic experiences but also their understanding of how a Tech education can open doors in various broader scientific and engineering communities.

### The Brown Award

Among the most prestigious New Mexico Tech honors is the Brown Award, presented annually at commencement to the top undergraduate student. Since 1900, it has recognized not just academic excellence, but the comprehensive development that characterizes the ideal Tech graduate. Recipients typically demonstrate exceptional performance across multiple dimensions: outstanding grades, meaningful research contributions, leadership within the campus community, and the kind of innovative thinking that Tech seeks to foster in all its students. Brown Award winners often go on to distinguished careers in research, industry, and academia, carrying with them not only the technical skills gained at Tech but also the recognition that they represent the institution's highest standards.

### **KTEK Radio**

KTEK, the student-operated radio station started in the 1970s and sporadically brought back to life in the following decades, represents a unique legacy. It combines technical experience with community service, creating opportunities for hands-on learning while providing a platform for campus voices and local programming. The station also serves as a cultural hub, providing a platform for student creativity, campus announcements, and community programming that helps maintain connections between the university and the broader Socorro community.



### **New Mexico Science and Engineering Fair**

New Mexico Tech's connection to the New Mexico Science and Engineering Fair (NMSEF) represents another legacy, one that extends the institution's educational mission beyond its own student body to inspire and nurture scientific curiosity among middle and high school students throughout the state. This relationship is Tech's commitment to science education at all levels, and helps create a pipeline of future scientists and engineers. For many participants, the science fair represents their first interaction with New Mexico Tech and its community. This legacy continues to grow each year, as new generations of students discover their passion for scientific inquiry through science fair participation and go on to pursue advanced studies and careers in science and engineering.

#### Interconnected Traditions

These various legacies demonstrate how a relatively small institution can build traditions and connections that influence generations of students, families, and communities. They represent the enduring values that make Tech not just a place to earn a degree, but a community that shapes lives and careers in lasting ways.

By Rebecca Clemens from source material by Bob Eveleth

ew awards at New Mexico Tech carry the personal touch and enduring significance of the Brown Award. Since 1900, this prestigious honor has recognized academic excellence, leadership, and character among the institution's students—a testament to one man's vision of inspiring greatness in young minds.

The award bears the name of Cony Thomas "C.T." Brown, affectionately known as "Captain Brown" to generations of students and colleagues. Born in Maine in 1856, Brown arrived in Socorro, New Mexico, on horseback in April 1880, long before the railroad reached the remote territorial town.

Despite lacking formal professional degrees, Brown became one of the Southwest's most respected mining experts through relentless self-education. He famously "studied geology and technical works on mining by light of candle or campfire," embodying the very spirit of determination he would later seek to inspire in students. Standing an imposing 6'4" or 6'5" tall, Brown possessed not just physical stature but moral authority that made him a beloved figure throughout the mining community.

In 1898 Brown was appointed to serve on the New Mexico School of Mines Board of Trustees (changed to Board of Regents in 1913), resigning in 1914. He served again from 1917 (as Board President in 1921-1922) until he resigned in 1922, when he was elected to the New Mexico state senate.





Brown medals awarded to James Avery Smith (1912, left) and Frank J. Maloit (1913, right). Photos courtesy of their sons, Avery and Robert.

In 1900, Brown began a tradition that would outlast his own remarkable career: offering a gold medal, at his personal expense, to recognize exceptional student achievement at the New Mexico School of Mines.

The first Brown Medal was awarded 125 years ago, at the 1900 commencement, to Carl J. Homme of Wisconsin for "the greatest proficiency in assaying, chemistry and metallurgy during a full year's work." <sup>1</sup> The unique inaugural award now known as the Homme Medal is a beautifully engraved gold shield

measuring 2" wide across its tie-bar and 2 5/8" in height. It was donated to New Mexico Tech's archives through the generosity of the Homme family.

The early years of the Brown Medal featured unique designs and occasional drama. Each medal appears to have been individually crafted, reflecting Brown's personal investment in recognizing student achievement. The 1902 ceremony presented a delicate situation when the winner was Elston Everett Jones, son of then-university President Fayette Jones, requiring diplomatic handling of the presentation. There are no records of winners' names in 1904, 1906, and 1908.

The 1909 commencement proved especially moving for Brown. As President E.A. Drake awarded the medal to Daniel M. Miller, the ceremony's recognition of Brown's selfless service sparked "a spontaneous demonstration." that didn't stop until Brown rose to address the graduating class with what were described as "very pertinent and forceful words."

In 1910 two students, George C. Baer and Charles "Carlos" Tiffany.



earned identical grades in the qualifying subjects. This unexpected tie led to the establishment of a formal procedure: contestants would receive special ore specimens for assaying until the tie was broken—a fitting resolution for a mining school.

By 1912, Brown had settled on the now-familiar design featuring a gold pan backed with crossed rock picks and hammers, capturing the essence of mining education. The medals awarded in 1912 and 1913 exemplify this standardized approach, though size and gold content varied over the years, possibly reflecting fluctuating gold prices.

From 1914 to 1922, the award disappeared, coinciding with reduced commencement activities. The tradition resumed dramatically in 1923 with Ward Benton Hamm receiving recognition not just for academic achievement but as the "best all 'round man" in qualities of "conduct, science, and leadership." No award was presented in 1945, the last time a year was skipped.

Brown's death one century ago, in January 1925, could have ended this remarkable legacy, but fortunately the Board of Regents recognized its value. That April, they formally declared that "the giving of the Brown Medal each year...should be kept up as a memorial to the



late C.T. Brown, that it should be registered as the Brown Medal, and paid for by the school." <sup>1</sup> The Regents' decision to continue funding the award institutionalized Brown's personal generosity, ensuring future generations would benefit from his vision.

Additionally, after fire destroyed the original campus building, known as "Old Main," in 1928, the Regents further honored C.T. Brown's memory by naming the replacement building "Brown Hall." Today, after a recent major renovation, it is still home to the university's administration offices.

In recent decades, the Brown Award recipient is the member of the graduating class who, in the opinion of the faculty, ranks highest in scholarship, conduct, and leadership. The award's evolution from recognizing narrow technical proficiency to embracing broader leadership and character reflects the changing nature of engineering education while maintaining Brown's core belief in nurturing well-rounded professionals. Each recipient joins a distinguished lineage connecting them to C.T. Brown's original vision of excellence.

In its 125-year history, a total of

113 Brown Awards have been presented. The first woman to receive the award was Willys J. Keith, in 1956, who earned her B.S. in Mathematics. Since 1900, only 20% of winners have been women, although between 1956 and 2025, the percentage rises to 33%. During the first few decades, the awards went primarily to Mining, Metallurgy, or Chemistry majors. Since 1951, students majoring in Physics (16 winners), Biology (13 winners), and Mathematics (10 winners) have dominated.

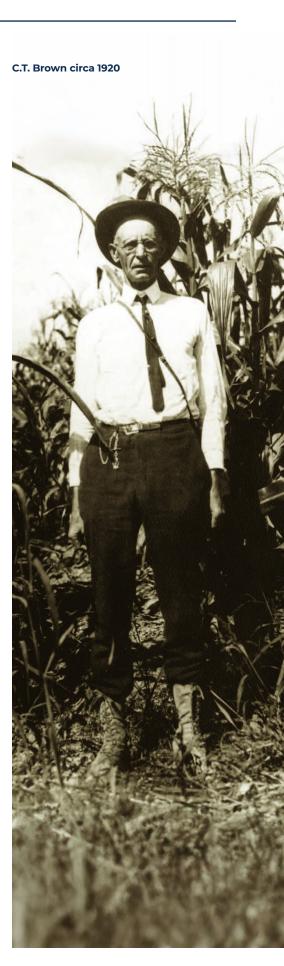
125 years after its inception, the Brown Award remains New Mexico Tech's most prestigious undergraduate student honor. While NMT has added other awards over the decades (including the Cramer, Langmuir, and Founders' Awards), none carry its historical weight and personal connection. As Ashley Bradshaw, the most recent recipient, noted, "Each student selected for the award...represents the individuality of the NMT community. Each recipient had their own background, goals, motivations, and characteristics that encapsulated their hard work during their undergraduate career."

This award represents the transformative power of individual generosity and the enduring impact one person can have on an educational institution. In Brown's own words and through his actions, he demonstrated that true leadership means investing in the next generation, a lesson that continues to inspire New Mexico Tech students a century later.

1 Eveleth, Robert (2018). A Biography of Coney Thomas Brown. New Mexico Bureau of Geology and Mineral Resources, available courtesy of author at

www.nmt.edu/advancement/alumni-archives-files/A%20Biography%20of%20Cony%20 T.%20Brown.pdf.





"I HAD THE HONOR OF BEING AWARDED THE BROWN AWARD IN 1993 WHICH ENABLED ME TO BE ACCEPTED INTO VETERINARY SCHOOL AT COLORADO STATE UNIVERSITY IN THE FIRST ROUND OF CANDIDATE SELECTION. I AM SO GRATEFUL FOR MY EDUCATION AT NM TECH AND THE SUPPORT I RECEIVED THERE."

- Kelley DeGroff, DVM (B.S. 1993, Biology)

"WINNING THE BROWN AWARD WAS THE CULMINATION OF A TRANSFORMATIVE PROCESS WHICH BEGAN WHEN I FIRST EN-**ROLLED AND BECAME INVOLVED** WITH THE NMT STEAM PROGRAM, WHICH LED TO MEETING MY FIRST FRIENDS IN **COLLEGE, TUTORING AT THE OFFICE FOR** STUDENT LEARNING, AND ULTIMATELY **BEING ENGAGED BY A STRONG TRADITION** OF MENTORSHIP IN THE DEPARTMENT OF CHEMICAL ENGINEERING. THE PROGRAMS AND MY EDUCATION AT NMT WERE THE BUILDING BLOCKS OF MY PH.D. IN CHEM-ICAL ENGINEERING FROM UT AUSTIN, AND BASED UPON MY DOCTORAL WORK, WE ARE NOW WORKING ON SPINNING OUT A FACILITATED TRANSPORT MEMBRANE **TECHNOLOGY FOR PETROCHEMICAL GAS** SEPARATIONS, IN PARTNERSHIP WITH BASF."

- Matt Davenport (B.S. 2018, Chemical Engineering)

"I BELIEVE THAT THE AWARD PLAYED
AN IMPORTANT ROLE IN MY ADMISSION TO MAYO MEDICAL SCHOOL, ONE
OF MY TOP CHOICES AND WHERE I AM
GRATEFUL TO BE FOR MY EDUCATION AT
THE MOMENT. I WAS INCREDIBLY SURPRISED TO GET IT. I
RECALL LOOKING AT THE AWARDS LIST ON THE PROGRAM
THE NIGHT PRIOR AND THINKING "WHOEVER GETS THAT
MUST HAVE BEEN INCREDIBLY ACTIVE. THERE IS NO WAY
THAT I WOULD EVEN HAVE A SHOT AT THAT."

- Tucker Diamond-Ames (B.S. 2022, Biology)

"THE BROWN AWARD WAS THE RE-SULT OF A PERSONAL GOAL I MADE WITH MYSELF BEFORE STARTING COLLEGE. I WAS JUST AN OKAY STU-DENT IN [HIGH] SCHOOL, BUT I TOLD MYSELF I WOULD GO TO NMT AND GIVE IT MY ALL - SEE WHAT I WAS CAPABLE OF. IN TERMS OF SURPRISE, I WAS NOT CERTAIN I WOULD GET IT BECAUSE I WAS LEARNING ALONGSIDE SOME VERY INTELLIGENT AND HARDWORKING PEOPLE. THEY SET THE BAR. AND IT WAS GREAT BECAUSE IT PUSHED ME TO TRY HARDER. WHAT REALLY MADE THE MOMENT SPECIAL WAS RECOGNITION THAT IT WAS NOT JUST ACADEMICS THAT MATTER. THE AWARD HELPED ME STAND OUT TO THE RECRUITING TEAM AT TEXAS INSTRUMENTS IN 2008. SEEING AS HOW I HAVE BEEN AT TI EVER SINCE. IT MADE A DIFFERENCE. THE TIME SPENT AT NEW MEXICO TECH BECAME THE CORE OF WHO I WAS PROFESSIONALLY."

- Jonathan Montoya (B.S. 2005, Chemical Engineering)

"I WAS COMPLETELY TAKEN BY SURPRISE TO RECEIVE THE BROWN AWARD! ESPE-CIALLY CONSIDERING I HAD OFFICIALLY **GRADUATED AT THE END OF THE FALL 2023** SEMESTER—I REALLY WASN'T EXPECTING ANYTHING AT THE MAY 2024 GRADUATION, JUST RECEIV-ING THE AWARD WAS A HUGE ACCOMPLISHMENT FOR ME. I REMEMBER FEELING LIKE I WAS STRUGGLING A LOT DURING UNDERGRAD, ESPECIALLY TOWARDS THE END. I THINK FOR THAT REASON ALONE, RECEIVING THE BROWN AWARD MADE ME FEEL EXTREMELY GRATEFUL - IT REALLY VALIDATED ALL OF THE EFFORT I FELT I PUT IN AND MADE ME FEEL LIKE I HAD MADE AN IMPACT AT NMT. IT WAS OVERALL A GREAT REMINDER TO ME THAT THE STRUGGLE IS OFTEN WORTH IT IN THE END. AND I'M INCREDIBLY PROUD TO HAVE BEEN RECOGNIZED IN THAT WAY. I APPRECIATE THAT THE BROWN AWARD HAS BEEN A WONDERFUL WAY TO HONOR UNDERGRAD-**UATE STUDENTS AT NMT. I HOPE IT CONTINUES INSPIRE GRADUATING STUDENTS LIKE MYSELF FOR MANY YEARS** TO COME."

- Juliana Barstow (B.S. 2024, Physics)

THE BROWN AWARD TRULY ENCAPSULATES MY EXPERIENCE AS AN UNDERGRADUATE AT NMT AND I FELT THAT
RECEIVING THE HONOR SOLIDIFIED MY
PLACE WITHIN THE ACADEMIC REALM. (I
AM NOW ENROLLED IN THE NMT ACCELERATED
MASTER'S PROGRAM), THE AWARD HELPED TO QUIET THE
IMPENDING IMPOSTER SYNDROME THAT ACADEMICS OFTEN
ENDURE. I FELT SEEN FOR ALL THE SLEEPLESS NIGHTS, LONG
AND NUMEROUS MEETINGS (SGA COMMITTEE, TRIBETA, AND
MORE), ENDLESS HOURS PLANNING EVENTS, OR BREAKS
SPENT VOLUNTEERING AT SCIENCE OLYMPIAD/SCIENCE FAIR/
SPEECH & DEBATE.

I ABSOLUTELY WAS SURPRISED TO RECEIVE IT. I HAD NOT LONG BEFORE GRADUATION RECEIVED THE BIOLOGY DE-PARTMENTAL SHORTESS AWARD AND FIGURED I HAD HIT MY AWARD QUOTA FOR MY UNDERGRADUATE CAREER. I WAS INCREDIBLY SHOCKED BY THE AWARD ANNOUNCEMENT - I DO NOT EVEN REMEMBER WALKING ACROSS THE STAGE.

PRIOR TO RECEIVING THE AWARD, I DID NOT KNOW THE EXACT HISTORY. WHILE THE AWARD IS NAMED AFTER FORMER DEDICATED NMT BOARD OF REGENTS MEMBER C.T. BROWN, THE AWARD GOES MUCH DEEPER THAN THAT. THIS AWARD HELPS TO RECOGNIZE [EXCELLENCE IN] THE STUDENT BODY AND PUSH PEOPLE TO EXCEL IN ACADEMICS.

- Ashley Bradshaw (B.S. 2025, Biology)

### **BEST FAMILY: A COMMUNITY OF FACULTY AND FAMILY**

By Sophie Bauer

Ask any New Mexico Tech alum what makes this university unique, and they'll likely mention its close-knit community and supportive faculty. For the Best family, that sense of community and connection became a recurring theme through two generations of Techies, beginning with the journey that brought **Jeff Best** (B.S. 1997, Mineral Engineering) to NMT. It was alumna Barbara Krueger (B.S. 1987 and M.S. 1989, Mathematics) who first introduced Jeff to the school when he was one of her students at Cochise College in Arizona. After hearing of his interest in engineering, Krueger handed Jeff an NMT catalog and told him to go there. Now, years later, Jeff's daughter Dr. Mackenzie Best (M.S. 2021, Geochemistry and Ph.D. 2025, Geobiology) would go on to earn two degrees from NMT. While she and her father were in different departments, they both experienced the personal touch that sets Tech apart.

The Best family - consisting of Jeff, Stacy, and their two daughters,

Mackenzie and Kylie – have had a somewhat unconventional path that was set off by Jeff's time at New Mexico Tech. Following a six-year stint in the Marines after high school, Jeff attended Cochise College to hone his math skills as a first step to becoming an engineer. It was there he met Krueger and first heard of NMT.

The catalog Krueger gave Jeff sparked his interest, but he was unwilling to attend NMT unless Stacy could find a job in Socorro, so they drove to New Mexico to visit the campus. While Jeff interviewed with Dr. Kalman Oravecz (Mineral Engineering Department), Stacy headed to Socorro General Hospital to meet with Dr. Oravecz's wife,

a social worker with a nursing background. After an impromptu interview, she met back up with Jeff, who told her that he thought he would be accepted to NMT. "That's good, because I already have a job," Stacy replied. That day they decided to move to Socorro.

After Jeff graduated from Cochise College with his Associate's in



Jeff Best in 2019, Glencore VP of Copper Mine Operations - Americas, Santiago, Chile

Professional Flight Technology and the two of them married in December of 1993, Jeff and Stacy packed up and moved to Socorro in January of 1994. They were newly married, broke, living near the railroad tracks by the sewage plant, and were soon to have a baby on the way. Stacy was working twelve-hour shifts overnight at the hospital and Jeff was a full-time student. They received a lot of support from Tech staff and Jeff's professors that made it all possible. Jeff would drop off baby Mackenzie to be watched by Dr. Catherine Aimone-Martin (Mineral Engineering Department) while he attended classes. "There's help everywhere at Tech and you just have to

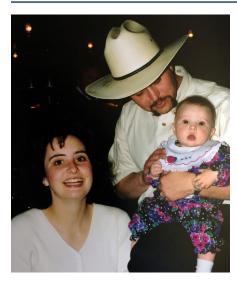
look for it," Jeff says. "You're not going to get there by yourself."

Jeff graduated in December of 1996 and immediately went to work for Phelps Dodge Corporation as an assistant mine shift supervisor at the Chino mine in New Mexico. His background made him a perfect fit for the position. Not only was he the fifth generation in his family to work for the company, but his hiring manager was a fellow former Marine, and the director of mining engineering was also a Tech alum. Jeff had also received a Phelps Dodge scholarship during his time at Tech.



Jeff Best at Luilu processing plant in Kolwezi, DRC, while CEO of Katanga Mining - Gettylmages

### **BEST FAMILY: A COMMUNITY OF FACULTY AND FAMILY**



Stacy, college student Jeff, and Mackenzie in 1995 at the SME Conference in Denver



Christmas family photo with their dog Lambeau Lubumbashi - 2008, DRC



Mackenzie with Mango at commencement 2025

Eventually, Jeff went on to get his MBA from the University of Chicago, graduating in 2001. Several years later, once again working for Phelps Dodge, Jeff was offered the opportunity to start a new mine in the Democratic Republic of the Congo (DRC) and the Best family moved to Africa in 2005. In 2010, Stacy and the kids moved back to the U.S. for high school. Jeff spent ten years total in Africa. Finally, he headed to South America for five years to close out his career with Glencore before retiring in 2020.

For Mackenzie, her path to NMT had been set in motion early on, beginning with her birth in Socorro and the years she spent growing up in New Mexico. While she ultimately selected Tech because of the geobiology graduate program, her desire to return to the southwest was an influencing factor.

Mackenzie had always known that she was interested in a graduate program that would combine geology and biology, but her initial interest had been in paleontology. She completed an internship at the Field Museum in Chicago, where she worked on the Tully Monster project. When she mentioned to her boss that she was interested in a future in paleontology, he informed her that her only options with that career were working in a museum or teaching. Despite enjoying the museum internship, Mackenzie realized that wasn't the career path she was interested in, so she began looking at graduate programs to explore other options.

At the time, Dr. Penny Boston, founder and former director of the Cave and Karst Studies Program at NMT, had just left Tech to work for NASA and the university was conducting a search for her replacement. Dr. Navid Mojtabai (Mineral Engineering Department), with whom Jeff had kept in touch with over the years, mentioned to him that they had received a number of applications

from promising scientists and suggested Jeff encourage Mackenzie to apply for the program.

Intrigued, Mackenzie began reading up on Dr. Boston's work and the geobiology program and decided to apply. When Dr. Dan Jones (Earth and Environmental Sciences Department) was hired, he was sent Mackenzie's application and they arranged a time to talk. She was impressed with his ideas and enthusiasm, and his research interests aligned with hers, so Mackenzie made the decision to attend Tech.

Stacy admits that when Mackenzie picked NMT, her initial thought was "Oh great, now we have to go back to Socorro." When she and Jeff were living there, they were "broke and exhausted," working very long hours with little time for fun. Visiting Socorro now is a completely different

experience: they go to the Capitol bar with Mackenzie, meet up with former faculty members, and really enjoy their time in Socorro.

Similarly to her father, Mackenzie quickly formed strong ties in the Tech community and became involved with a number of different organizations. She served for several years as the president of the student chapter of the American Association of University Women (AAUW) and is currently



Mackenzie Best descending into her cave research

### **BEST FAMILY: A COMMUNITY OF FACULTY AND FAMILY**



Jeff, Mackenzie, and Eric Best with Mackenzie's former coworker from the DRC mine, Fern Simpson, at an SME conference



L to R - Ilaria Vaccarelli, Heidi Aronson, Mackenzie Best, Ilenia D'Angeli, and Zoë Havlena at Frasassi caves, Italy

finishing her term as student trustee for the New Mexico Tech Foundation Board. The previous two years, Mackenzie had also been involved in organizing the Rocky Mountain Geobiology Symposium, a regional conference that is organized and led by graduate students and was hosted by Tech in 2024 and 2025.

One area of overlap for Jeff and Mackenzie is the Society of Mining, Metallurgy, and Exploration (SME) Young Leaders Committee, a networking organization of early career professionals under the age of 35. Members can get involved in various committees, build leadership skills, and meet people who are at similar stages in their careers. Jeff and Mackenzie were both members. "We're probably the only father-daughter Young Leaders ever," Jeff joked.

After graduating with her Ph.D. in May, 2025, Mackenzie took a consulting position for the biotech company Koonkie. Like Jeff, she found that her education at Tech did an excellent job preparing her. The work Mackenzie is doing now is a direct application of her skill set as it is a continuation of the work she did for her dissertation. Her background also contributed to her fit in the role: between her undergrad and Master's degrees, Mackenzie worked as an ore control geologist in Peru, making her one of the only Koonkie employees with a geology background and mining experience.

Daughter Kylie pursued a different path. She earned a B.A. in 2019 in Government & Legal Studies from Bowdoin College, a J.D. in 2023 from American University Washington College of Law, and a Master's in 2024 in International and European Trade Law from Université Paris Nanterre. She was admitted to the New York State Bar Association in January 2025.

The Best family remains strongly connected to Tech. Jeff visits Dr. Mojtabai whenever he returns to Socorro, and he and Stacy have maintained friendships with Tech staff and

community members. Likewise, Mackenzie's former labmate Zoë Havlena (B.S. 2017 and M.S. 2019, Biology; Ph.D. 2025, Geobiology) is one of her best friends; Mackenzie was recently in Zoë's wedding. Mackenzie participated in a weekly game night with a group of the Bureau of Geology staff members and had close relationships with all her professors that would

not be possible at a larger school. That personal touch was what appealed to Jeff during his original campus visit. Stacy, too, has witnessed it firsthand during her time living in Socorro. "It's those small connections that make Tech stand out from other schools," she says.

The family gives back to Tech in various ways as well. Over the course of his career, Jeff had the opportunity to hire a number of Tech students, bringing two students to Africa and one to South America. It is his hope that those students will eventually go on to help Tech students in similar ways further on in their careers.

In addition to serving on the NMT Foundation Board, Mackenzie has also acted in a mentoring role; younger students in the E&ES department often come to her with questions. Additionally, she worked as a field TA for the International Geobiology Course, aimed at first through third year Ph.D. students. Currently, the course's field component is in the Frasassi sulfidic cave system in Italy, where Mackenzie did fieldwork with Dr. Jones during her time at Tech. The program directors brought Mackenzie on to assist with translation, logistics, and guiding students through the cave system.

Another way the Bests give back to NMT is through the Best Family Scholarship they endowed, which benefits women in the Mineral Engineering and E&ES departments. Jeff was the recipient of several scholarships during his time at Tech, which were the only way he was able to attend. Now they're in a position to help current Techies. Mackenzie serves on her family's foundation board and hopes to give back to Tech in a similar way one day.

"At the end of the day, I really learned a lot, and I really value the friendships and professional relationships that came out of my time at Tech," Mackenzie says. To that, Jeff simply adds, "We still love New Mexico Tech."

### MINING THE AIRWAVES: KTEK'S LEGACY AND REBIRTH

By Jay Ann Cox, Ph.D.



In the same way a dormant mine can be brought to life with new technology and fresh energy, the university's student-run radio station, KTEK, has been unearthed and revived. A new generation of students, driven by a desire for expression and connection, has dusted off the legacy of KTEK and brought it roaring into the 21st century.

The station is poised for a full-scale relaunch in Fall 2025. This resurgence began with a simple idea from Jack Nation, a senior in Physics. "During my time here, the student community to me has always felt scattered," Nation explains. "Many events seemed to happen where after I would ask fellow students about it, they would say they didn't even know it was happening."

Nation's personal ambition fueled the project. "I have always wanted to be a DJ for a radio station, especially in college," he says. "When I came to NMT, I was always a bit sad that it was something I wouldn't be able to do. At one point, I figured, 'Why not start it myself?'"

He brought the idea to David Koshkin, a senior Chemistry major, who immediately had a grander vision. Koshkin suggested expanding the concept from a simple radio station into a modern media organization. From there, KTEK took off.

Now serving as the station's producer and programmer, Koshkin is helping to steer the mission. "We wanted to establish a voice for the students," he notes, a sentiment that echoes through the station's burgeoning team. "KTEK's mission is to make sure the student community is informed, better connected, and to provide an outlet for students to express themselves in a variety of ways."

To understand where KTEK is going, one must first dig into its past—a history rich with passion, ingenuity, and a rebellious spirit.

Dan Carlson (B.S. 1981, Geology), who was on staff during the 1978-79 school year, remembers a very different era. "When I got to Tech in 1978, there were only two sources of music available, music you brought with you and played





L-R: Ed Duncan – PR Director, Dan Carlson – Music Director, Mark Leo – Engineer, Todd Kay (deceased 2024) - Program Director, Diane Hattler – Secretary/Treasurer, Bruce Brown – General Manager

on your own stereo, and music that was 'piped in' to the school," Carlson recalls. KTEK operated without a radio tower, broadcasting via a cable system directly to dorm rooms. It was a passionate, if loosely organized, operation. "We were more akin to a loose group of 'radioheads'.... Everyone diligently showed up for their shifts and DJed their hearts out."

That fighting spirit intensified in the early 1980s under the leadership of Diane Hattler (B.S. 1985, Geology and Technical Communication). Initially a "painfully shy" student who joined to build her confidence, she eventually became the general manager and found herself in a constant battle to keep the station alive.

"We had one of the deans who would not let the radio station stay on the air," Hattler remembers. "He gave KTEK zero money." Undeterred, the students got creative. They hosted fundraisers during the 49ers festival, including a pie-throwing booth. The target? The very dean who controlled their funding. "If I hit you with a pie," Hattler gambled, "you have to give us money for the station." A photo exists somewhere capturing the fateful, splattering moment. "I prayed for a hit," she laughs. Her aim was true,

### MINING THE AIRWAVES: KTEK'S LEGACY AND REBIRTH



Dave Koshkin, KTEK Producer

and the station secured several hundred dollars to buy new records from Sound Warehouse in Albuquerque, a vital upgrade from the often-terrible demo records sent by music companies.

The challenges didn't stop there. When their signal was threatened, a group of physics majors took matters into their own hands. "Don't go up against students," Hattler advises. "They woke me up in the middle of the night after an 'outage.' I asked what are you doing, and they said, 'We can hook the station back up,' and they did, at 2 a.m." Realizing she needed a powerful ally, Hattler approached the university's new Vice President for Administration and Finance, Dr. William D. Peterson, who had a background in radio and television. He became the faculty adviser the moment he heard there was none, securing KTEK's institutional foothold. For Hattler, who went on to a career in geology and counseling, the station was more than a club; it was a "way to be creative after being so brainy in class."

Fast forward more than four decades. The passion that Hattler and Carlson describe is from the same vein of gold that Nation, Koshkin, and their team are now mining, but the tools have changed—dramatically. The new KTEK is a multi-platform entity, leveraging streaming technology through YouTube and Open Broadcaster Software (OBS), editing with DaVinci Resolve, and building a community with clips on Instagram and TikTok.

The focus has expanded from music curation to content creation, including interviews and news updates that aspire to bridge the gap between the student body and university administration. The commitment of the

students driving this revival is formidable. Koshkin, for instance, is not only managing KTEK but is also preparing for the MCAT, with plans for medical school. He sees his work, both in medicine and media, as a form of community service.

The crew is large and growing, a testament to the project's appeal. "Rio Sessions (Physics), Melina Karavousanos (Earth Science), Aaron Madrid (Mechanical Engineering), Jaina Olson (Management of Technology), Joshua Evans (Biomedical Sciences), and Lauren Hall (Physics) have all made big contributions," says Nation. He also credits the efficient support of team members like Zoë Finholm. NMT Student Activities Coordinator, in managing supplies and momentum.

They face the familiar challenges of any startup: securing a budget, building an audience, and navigating institutional structures. Yet, their vision is ambitious. "My hope is that KTEK remains a reliable student-led organization where people can express and share their creative ideas," Nation says. "I hope that KTEK lives on to be a reliable opportunity for students to relax from their classes a little bit, meet new people, and express their creativity."

Just as mining technology evolved from pickaxes to sophisticated machinery, the faint signal that once traveled through cables in the dorms has been amplified into a dynamic digital media hub. The legacy of KTEK was never truly buried; it was simply lying dormant. With the fresh energy of this new generation, that potential is being realized, building a lasting platform for communication and community.

The future is bright for KTEK. The airwaves are live, and the voice of NMT students is about to get much, much louder.

To ensure their future plans, they are working to raise \$30,000 for the new studio; you can support their efforts at

host.nxt.blackbaud.com/donor-form/?svcid=renxt&formId=d1be3079-0ebe-41de-bc9a-61 e000f57360&envid=p-N6Brq-II4ECDESAqpl7RbQ&zone=usa.

You can learn more about KTEK at

techconnect.nmt.edu/ktek/home/, and watch their podcasts on their YouTube channel at https://www. youtube.com/@NMTKTEK-007.







By Jay Ann Cox, Ph.D. and Corey Family





Corey Family 2012

A legacy is rarely built by design. It is not a blueprint drafted and followed, but rather a map that takes shape over time, drawn by the quiet influence of role models and the steadfast guidance offered to the next generation. It is a story of trails marked, not routes dictated, where the values of community, hard work, and intellectual curiosity become the key landmarks on a family's journey.

For the Corey family, the most significant landmark on their map has always been located at coordinates 34.0661°N, 106.9056°W. This specific point—a small, vibrant town in the high desert of New Mexico—is home to the world-class institution that lies at the family's heart.

The story begins with

Dr. James "Jim" and Lonna Corey, the first generation to plant roots in Socorro. Although Jim and Lonna are from Montana, and their four oldest children were born there, Jim moved the family to Saudi Arabia for a faculty position at a newly-founded science and engineering university there in

Dr. James Corey, 2000

1969, then called the College of Petroleum and Minerals (CPM), but now known as King Fahd University.

After four years living in Saudi Arabia, Jim took a one-year teaching post at New Mexico Tech to cover for a tenured professor, who had taken a sabbatical year. It seems that New Mexico Tech's magical pull had begun, and Jim landed a permanent faculty offer and moved the whole family to Socorro after returning to Saudi Arabia to

teach for several more years. Beginning in 1978 and continuing until his retirement, Jim dedicated himself to New Mexico Tech, teaching literature and writing. He eventually served as the Associate Vice President of Academic Affairs and the Associate Vice President of Research before his retirement in 2002.

His most profound impact isn't measured by titles, but by his tangible contributions to student life and academic innovation. Recognizing a need to bridge the worlds of science and communication, he was part of a team who established the state's first Bachelor of Science program in Technical Communication (TC). He also championed the creation of Tech's first computer lab for writing, leveraging a connection with Hewlett-Packard to bring cutting-edge technology to campus. The lab was an immediate success, so vital that students would arrive at 4 a.m. just to secure a terminal.

But Jim's vision extended beyond the classroom. He understood that a thriving university required a thriving community. He was a constant presence on campus, encouraging other faculty to participate in student activities, including helping during move-in day.

Corey family in Socorro 1982







**Corey Family about 2002** 



Jim and Jeff Corey with Jeff's kids Tatiana and Alex in Madrid, Spain 2015

He believed that enriching the town was essential to attracting and retaining students, fostering an environment where faculty and students felt like a cohesive, supportive unit. This ethos of service was shared by his wife, Lonna.

Lonna was an influential and beloved presence in Socorro, having been an OB and ER Nurse, a nurse educator, and Director of Nursing at Socorro General Hospital. Lonna was one of New Mexico's first recipients of a grant from the Kellogg Family Foundation to start the Families First program supporting Socorro County and the nearby Alamo Navajo Reservation with pre-natal and wellbaby care for families with children up to 4 years old. In the years since Lonna began that program, Families First has grown to be an instrumental support program across the state. Lonna dedicated her professional life to public health and to families across Socorro County, including Tech students. Together, Jim and Lonna modeled a life of purpose, demonstrating that a career could be a platform for profound community impact. Lonna passed away in 2009, but her continued presence and influence on the family and on public health and families in New Mexico is palpable.

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Jeff Corey as COO of Seven Energy with wife Madonna Valentine, 2016



Techies Jeff Corey and Tom Dea (B.S. 1985, Geological Engineering), Spring Break 1984

Their five children—Ray, Jeff, Craig, Janine, and Glen—grew up immersed in this environment. For the younger three, the Tech campus wasn't a distant institution, it was their playground and their community, and ultimately, the academic home for Ray, Jeff, Craig and Janine.

Oldest son **Ray** (B.S. 1985, Environmental Engineering) recalls the uniquely intimate and rigorous nature of a Tech education, with core classes so small that his four-person seminar felt more like a roundtable discussion with the professor. It was in Calculus I class that he met **Cara Wilson** (B.S. 1986, Technical Communication), a student from Los Alamos who had fallen in love with geology during a campus preview day. When her future father-inlaw, Jim, launched the technical communication program, Cara found her perfect fit, blending her passions for science and writing.

Both Ray and Cara chose NMT for its STEM excellence and the focused environment of Socorro, a decision that shaped their professional and personal lives. Ray's environmental engineering degree from Tech led him to the Environmental Protection Agency for a couple of years, then on to the Department of Energy as an engineer and

executive manager. Cara's career has taken her far afield with Sandia National Laboratories, but she has always been a strong proponent of hiring NMT students and grads in their internship program.

Second son, **Jeff** (B.S. 1984, Petroleum Engineering), found his way to Tech through a more accelerated path. After taking Dual Enrollment (DE) classes in high school, he earned the prestigious NMT Regent's Academic Scholarship, entering the university with almost enough credits to be a sophomore. Despite growing up around campus as a "professor's kid," Jeff admits the academic rigor was still "quite a shock." It was a challenge he embraced, thriving amongst the best and brightest students in the region.



Deb and Craig Corey with sons Ben and Sam



**Craig Corey and Deb Lopez-Corey** 



**Deb Lopez-Corey and Craig Corey** 

This experience instilled in him a deep appreciation for the quality of a Tech education—a conviction that has defined his professional career. As an executive at ConocoPhillips, Jeff has made a point of hiring numerous Tech graduates, trusting their robust background in science and engineering and their formidable work ethic. Jeff's commitment to hiring Tech graduates strengthens the university's reputation in the global energy sector. His service on the NMT Foundation Board and the Petroleum



Carson Bukowski and Janine Corey



Carson Bukowski with his dog Dakota at Socorro Plaza Spring 2025

Engineering Advisory Board underscores his dedication to co-developing NMT and Socorro, ensuring future students are drawn to a campus of STEM excellence.

Craig's (B.S. 1991, Environmental Engineering) connection to Tech is personal. Moving back to Socorro as a fourteen year old, the campus was his playground. He felt an innate comfort there that eventually led him to return for second degree - and meet his wife. After earning a business degree at UNM and working in the business world, Craig realized the value of adding an engineering degree to strengthen his overall educational background. NMT fulfilled that goal, which led to a long career in New Mexico's engineering consulting community.

His wife, **Deborah "Deb" Lopez-Corey** (Psychology, 1987–1991), embodies another facet of the NMT

story. A Socorro native whose mother worked for the National Radio Astronomy Observatory (NRAO), Deb was a first-generation college student. She recalls the struggle of navigating the challenging academic requirements, but appreciates how Tech's foundational curriculum requiring all students to master the basics of chemistry, physics, and math—provided a universal, rigorous grounding. Her journey has taken her from the nearby community of Luis Lopez to Socorro High School to NMT to, ultimately,



Deb and Craig wedding day

a UNM graduate. Deb now serves on New Mexico Tech's Foundation Board and her educational path is a powerful reminder of the university's role as an engine of social and economic mobility.

Daughter Janine (1982–1985, Computer Science and Technical Communication) took NMT DE courses in high school like her brothers. Her father began the NMT Technical Communication program during her senior year in high school and he encouraged her to enroll as a TC major since she was adept at languages and a good writer. She did, but started taking Computer Science (CS) classes, as well. She discovered her language ability translated to computer languages. She didn't like Fortran, but did like the elegance of PASCAL, and started taking more CS classes. At the end of her second year at NMT, she qualified for a six-month internship at Los Alamos National Laboratory and then a job at a Computer Research Consortium in Austin, TX. Janine moved her studies to UT Austin, completing her undergraduate and graduate studies there. She began working in technology research and innovation fields during the tech boom days there, continuing her NMT pursuits.



The four older Corey siblings with Jim Corey about 2015



Classmates Bill Gallagher (B.S. 1989, Computer Science), Janine Corey, and Brian Deen (B.S. 1988, Computer Science)

After a career in technology leadership and innovation in Texas, she eventually landed in Seattle, WA in 2015 with Amazon Web Services (AWS). She has since been both a cloud start-up CTO and a technology strategy Partner with Price Waterhouse Coopers (PWC), one of the "Big Four" global consulting firms.

Janine notes that she enjoys STEM and enjoys being challenged. For example, there were classes at NMT she wasn't initially good at, but she found if she worked hard enough, she'd become competent and even excel. This gave her the confidence to do hard things throughout her career. Janine is a strong proponent of New Mexico Tech and the personal and focused education she received there, but feels there are fewer opportunities for undergrads to participate in hands-on research with faculty members through funded projects. As someone who's had a successful career on both the business side and engineering leadership side of computer technology, she continues to be a strong advocate for women in technology and STEM, including participating as a speaker at NMT Women in STEM events.

Representing the third generation, Janine's son **Carson Bukowski** (B.S. 2025, Mechanical Engineering), was influenced to attend NMT by both grandfathers (Jim Corey and Art Bukowski, NMT Mathematics professor from 2000 until his passing in 2016), his four uncles, and his mom. As a high school student in Las Cruces, NM, he took DE classes through NMSU, and then started at NMSU as an Electrical Engineering major.

Deciding he wanted a career with a meaningful mission, he changed to pursue medical-related fields. Taking an academic break during and post-COVID, he worked and earned some certificates. He then moved to Socorro to finish his undergraduate degree, majoring in Mechanical

Engineering with a focus on bio-engineering / biomedical. He served as team lead on two capstone projects: one developing a NASA cubesat, the other a wearable eyedropper. His final paper for Advanced Engineering Methods and Assemblies class was on titanium-bone integration, a brief exploration of the potential for using PVF (polyvinyl fluoride, a material that reacts to changes in temperature and stress) to line titanium implants. After graduation he moved to Seattle, WA, where he's job hunting and exploring biomedical/bioengineering graduate programs.

Carson noted his two years of NMT capstone projects experiences helped train him on project management, planning, and oversight. During his first semester as a senior he consistently studied and worked 70+ hours a week; his final senior semester he managed to reduce that to 62 hours a week. He noted that, following his NMT experience, there are very few situations he can be thrown in and not find a book, crack it open, teach himself, and find a correct equation or a solution.

This multi-generational story of service, academic pursuit, and community building demonstrates how a legacy takes root. It was never a mandate that the Corey children attend Tech, but the environment created by Jim and Lonna—one of intellectual curiosity, community engagement, and genuine care—made it a natural choice. Today, that legacy continues to ripple outward.

The thread that began with Jim's career choice in 1978 continues to weave itself into the future. The Corey family's story is a profound illustration that a legacy's true measure is not in the names engraved on buildings, but in the lives shaped, the communities strengthened, and the opportunities created for others—a living, breathing addition to New Mexico Tech's own legacy as a STEM leader.

### A LEGACY OF INQUIRY: THE NM SCIENCE & ENGINEERING FAIR

By Julie Sanchez

Each spring, New Mexico Tech comes alive with something extraordinary. It's not the usual flow of college students crossing campus between classes, but the vibrant energy of future generations of scientists and engineers. Middle and high school students from across New Mexico arrive in Socorro with poster boards, prototypes, teachers, and chaperones, to participate in the New Mexico Science and Engineering Fair (NMSEF). For more than 70 years, Tech has proudly hosted the NMSEF and provided the opportunity for thousands of young people to explore the frontiers of discovery. The NMSEF is a long-standing tradition firmly aligned with Tech's mission and values, and the strong partnership between these two institutions reflects the importance of science education across the state.

This legacy began in Philadelphia, Pennsylvania with the launch of the International Science and Engineering Fair, now known as ISEF, in 1950. The founding organization of ISEF, the Society for Science, sought to elevate science education by bringing attention to student-driven research. Soon after the genesis of ISEF, the need for regional "feeder" fairs was recognized to create a pipeline of local student projects. New Mexico was one of the first states to establish a state-level fair in 1952. Since then, the NMSEF has provided students with the chance to share their research and advance to the prestigious international stage of ISEF.

To fully understand the legacy of the NMSEF, it's important to consider the foundational tenets that it shares with Tech. The partnership between the NMSEF and Tech is more than logistical, although Socorro's central location is ideal for a statewide event. This venture is rooted in a mutual pursuit of critical thinking, curiosity, and discovery. Hosting the NMSEF each year isn't just a community service that Tech provides. It's a vital expression of the university's mission to cultivate scientific literacy and innovation. In many cases, participation in the fair is the first step toward a rewarding career in STEM.

Such was the experience of Isaac Armenta Perez, currently a Mechanical Engineering major at Tech. He was introduced to New Mexico Tech when he competed in the NMSEF in 2023 during his junior year of high school. "Prior to the NMSEF, I did not know that Tech existed," he notes. Despite that, Isaac's visit to Socorro and positive experiences during the science fair led him to enroll at Tech as an undergraduate in Fall 2024: "I made memories on campus before even attending the school."

Isaac's moment of triumph at the NMSEF was one he'll never forget. "Winning first place felt like a miracle. We were the last to be named up on stage, and the moment was relieving, as if all my hard work had paid off and now it was time to enjoy the moment before heading back to work to try and win at ISEF." But it wasn't just his victory that inspired him, it was also the atmosphere of camaraderie and discovery, he says. "While I was super nervous,



Isaac Armenta Perez, Evan Kennedy, and Lucas Tang, 2023 ISEF Special Award



Faith Valdez with her 2024 NMSEF project



Faith Valdez at the 2023 NMSEF



Faith Valdez wins first place in her NMSEF category 2023

I found others to be calm and collected, even taking the time to help other competitors set up their stands if anything was missing. Thinking back [to] other projects, I found myself impressed at how prepared and innovative other projects were compared to my own," he recalls. "It let me know I was doing something right if I landed in first place in my first science fair."

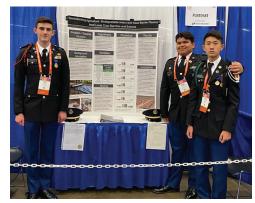
New Mexico's expansive geography and sheer size present unique challenges in delivering equitable STEM opportunities to every corner of the state. However, the NMSEF model works to be more inclusive, and strives to give all students the chance to participate. Through a regional fair structure, students from cities and small towns alike compete locally and advance to the state-level competition. In this way, the NMSEF provides a forum for great ideas and discoveries to be shared. "Science Fair isn't just a competition—it's a spark that ignites a lifelong passion, opening doors, fueling dreams, and helping students discover their purpose," says NMT's Ann Hatch, the New Mexico State Science & Engineering Fair Director.

Since 1952, thousands of New Mexican students have developed and tested their hypotheses, observed results, formed conclusions, and presented them (sometimes very nervously) to myriad volunteer judges. Many of these

### A LEGACY OF INQUIRY: THE NM SCIENCE & ENGINEERING FAIR







Tate Plohr, Dillan Uphoff, Alyssa Sun, Camilla Carreon, and Aarush Tutiki at ISEF 2025

Alyssa Sun at ISEF in Columbus, OH, 2025

Evan Kennedy, Isaac Armenta Perez, and Lucas Tang at the 2023 ISEF

young scientists live in rural areas, and the NMSEF might be their first encounter with a research university campus. Walking through the oasis of New Mexico Tech, interacting with scientists, and eating in the campus cafeteria can be a transformative experience. For many, it plants the seeds of aspiration and offers a tangible vision of what a future in science might look like. And, most importantly, it affirms that college is an accessible goal.

"My sophomore year at Grants High School, I only did a science project to get a grade. But once I came to the science fair at Tech, I just fell in love with the school. Everyone was so nice and welcoming, and I started looking into Tech after the science fair," shares Faith Valdez, a Chemical Engineering student at Tech since Fall 2024. "My first impression was 'this is a smart school,' but that changed to, 'this is where I belong."

Faith participated in the NMSEF for three years, won first place in her category during her junior year, and advanced to the ISEF in her senior year of high school. She attributes her success to countless hours of hard work, plus the support of her parents and her science teacher, Mr. Cody Hayes. "Winning my category in the state science fair, then going to International in Los Angeles; that has been the best experience of my life," she reflects.

Isaac and Faith are two of many students whose love of inquiry brought them to Socorro, and ultimately inspired many to pursue degrees in STEM. There's more than anecdotal evidence to suggest that science fairs improve educational outcomes. Research from the National Center for Education Statistics shows that students who participate in science fairs are significantly more likely to pursue STEM degrees and careers. They're also more likely to score highly on standardized science assessments, to engage in advanced coursework, and to report high levels of interest in science and engineering.

The boost of confidence from a job well done can last a lifetime. Isaac remembers exactly when that happened for him. "I had a moment of realization where I knew what I was doing. There were many hours of practice perfecting

the introduction speech, and all I had to do was let it come naturally."

Past participants of the fair have gone on to study at prestigious universities, publish original research, and contribute to high-impact fields such as aerospace, environmental science, and biomedical engineering. Of those, a substantial number chose to enroll at Tech as undergraduates and continue their research journeys. Many continue their involvement as Science Fair judges and volunteers. As Ann Hatch attests, "Students discover a love for STEM through this event, choose to attend New Mexico Tech, and return to help support the next generation of young scientists."

Today, the legacy of NMSEF is visible in classrooms, universities, and industries across New Mexico. It's felt in the continued support from alumni, faculty, and staff who volunteer each year to judge projects, sponsor awards, and encourage students. For Faith Valdez, serving as a science fair judge in April was a full circle moment. Her advice for aspiring student researchers? "It's hard work but it's really worth it. It takes a lot of time, and something will always go wrong, but don't give up. Making mistakes is how you learn."

The NMSEF continues to define the landscape of research by cultivating curiosity, rewarding inquiry, and building confidence, one homemade solar collector at a time. "It's about giving students the opportunity to reach higher in life than they ever imagined—to see a future beyond what they thought was possible," confirms Ann Hatch. "Science Fair shows them that the sky's the limit. It gives every student—no matter how small their town or how rural their surroundings—a chance to see the value of their ideas and the impact they can have on the world."

At New Mexico Tech, hosting the NMSEF is a proud tradition and a meaningful investment in our shared future. The legacy of inquiry founded by the NMSEF in 1952 reaches far beyond M Mountain and our beautiful state. Its influence expands into the classrooms, communities, and careers that will define the next century of discovery.

By Todd Brogowski, The Mountainair Dispatch, and the Stanley Family

The Stanley family's relationship with New Mexico Tech and Socorro spans more than six decades, a compelling case study in multi-generational STEM career development and community involvement. From Doc and Jean in the 1960s, to Matt, Mike and Meri in the 1980s, to Brian, Laura and Erik in the 2000s, this family exemplifies the diverse careers available to STEM-educated professionals and the enduring value of family and community.



### **FIRST GENERATION**

For some, taking on their third career would be a sign that they are doing something wrong on the job. For **R. Dennis** "Doc" Stanley (B.S. 1961 and M.S. 1964, Physics), his third career - hunting down and cutting precious stones - is a labor of love. Doc explained that, when he retired from his second career as a Socorro high school teacher and basketball and golf coach, his latest profession of hunting and polishing rocks and gemstones has taken him and his wife Jean around the world. Doc recounted stories of recent trips to the Australian outback where he went gem hunting near Alice Springs and Coober Pedy; he was also planning a trip to Fairplay, CO, for a rock, gem, and mineral show.

Doc and his wife, **Jean**, both graduated from Clovis High School in Clovis, NM, and have been married for more than 66 years. Doc's relationship with New Mexico Tech began in 1957, when he was offered a work-study scholarship that allowed him to study half-time and work half-time to pay for his education. He was one of the first group of high school graduates who came to Tech this way. Doc's scholarship put him in the Terminal Effects Research and Analysis (TERA) department, now known as the Energetic Materials Research and Testing Center (EMRTC). He described New Mexico Tech as having a close student body, with only 300 students at the time he attended.

Jean jokes that she earned her "Ph.T." degree, "which is 'put hubby through," she explained – New Mexico Tech gave her a certificate for putting Doc through school. She recalled, "Back in the 50s and 60s, there was a group of professors' wives who took all the student wives under their wing and formed a club called the Dames Club. We had meetings regularly and we learned new recipes and



Mike and Meri Stanley, Laura County, Doc and Jean Stanley (photo credit Todd Brogowski)

we learned things about [New Mexico] Tech, what our husbands were doing, and so forth. And then, when our husbands graduated, we earned our Ph.T. [degree]."

Doc and Jean did not stay in Socorro - or the United States - for long. Doc accepted an invitation to teach at University College Dublin, where he pursued doctoral studies in physics from 1963 to 1968, establishing his research focus in two critical areas: elementary particle physics and radon in the environment.

Doc's research portfolio includes significant contributions at major particle physics facilities during a transformative period in the field. At CERN (Conseil Européen pour la Recherche Nucléaire), he participated in elementary particle research during the facility's early operational years. He also worked with a collaboration of European universities which included visiting researchers in East Berlin and Poland, behind the Iron Curtain. His work extended to the particle accelerator at Brookhaven



**Doc Stanley 1964 Porphyry** 



**Mike Stanley EMRTC Director** 



Meri and Mike, 2019 President's Club Dinner



Mike Stanley early 1980s

National Laboratory in New York, providing exposure to cutting-edge experimental methodologies. His research involved elementary particles, specifically the Lambda Zero baryon (^0), a subatomic baryon that Doc described as "acting like a heavy neutron."

Doc and Jean returned to Socorro in 1968 where he spent two years as a post-doctoral fellow, and two years as a NMT faculty member. He spent four

years studying radon effects in the environment. Then he shifted to Socorro High School to teach physics and mathematics, and coach the basketball and golf teams. He spent 23 years at the high school before retiring. Jean spent 27 years at First State Bank, retiring as Vice President. She also served as President of the Socorro County Chamber of Commerce.

Doc's background in math and science allowed him to influence his students toward a higher technical education. Being a NMT graduate and the experiences he had as a result of that provided a reason to recommend NMT.

### **SECOND GENERATION**

Doc and Jean's oldest son, **Mike** (B.S. 1984, Mining Engineering) remembered his family's time in Ireland when he attended a convent school that used the Montessori method of teaching. "It wasn't structured like our classrooms are here [in the U.S.]. You would all be in a classroom but you were allowed to explore things that

interest you. They wanted you thinking on your own and doing things on your own, which was a lot different than the schools here," he recalled. Mike graduated from Socorro High School in 1978 and attended Odessa Junior College on a golf scholarship for two years before transferring to New Mexico Tech.

Mike said that economics figured in his decisions after he graduated from New Mexico Tech with his brother, Matt, in 1984. "Mining and petroleum go through cycles where there's a lot of jobs or there aren't any jobs. And when we graduated, it was very difficult to find a job. So I actually started working out at TERA as a laborer for the summer while I was looking for a job. In the fall they offered me an engineering position, and so I stayed there and worked there for my whole career,."

Mike's career at EMRTC was diverse and included numerous disciplines from ballistics to warheads,



Mike, Jean and Doc Stanley selling some of their geology specimens







Laura County, O.D.

Jean Stanley and her Ph.T. Certificate (photo credit Todd Brogowski)

**Brian Stanley** 

explosives, and counter-terrorism research. His work took him to various places around the world and included projects intended to protect infrastructure and people. Mike said the education he received at NMT gave him the basis in engineering to carry out his work at EMRTC. He worked at EMRTC for 36 years, spending the last five years as Director before retiring in January 2022. "I really enjoyed my time at EMRTC working with amazing people, both local and international. EMRTC is such a valuable resource for NMT, bringing in people and funding from all over the world."

In a 2019 NMT interview, Mike said, "My favorite memory of Tech is meeting my wife!" **Meri (Rogers) Stanley** (B.S. 1985, Mathematics), worked as a Data Analyst at the National Radio Astronomy Observatory (NRAO) in Socorro from 1991 until her retirement in 2021. She often travels to rock shows with Mike, and is good-natured about the rock collections taking over their house.

Doc and Jean's younger son **Matt** (B.S. 1984, Petroleum Engineering) worked as a petrochemical engineer and now spends six months each year abroad, living in Malaysia. Like his brother and his father, Matt is passionate about increasing enrollment at New Mexico Tech. He also hopes that Tech students are connected with more industry insiders to provide them with real-world experience in the petroleum industry.

The low cost of attending New Mexico Tech made the university an attractive option for Matt. "I went to Tech because I got a thousand dollar a year scholarship and could stay at home and it wouldn't cost mom and dad any money for me to go to school. One of the teachers at the high school had a petroleum engineering degree, so he encouraged us to study petroleum engineering as well. So there were a couple of reasons I went to Tech."

Matt described moving up the ladder in the petrochemical industry. "Jeff Corey (B.S. 1984, Petroleum Engineering)

graduated high school with me and we both went to Tech to get a petroleum engineering degree, and he ended up working for Conoco and [so did I]. We weren't together in the same place until Dubai." Matt noted that he and Corey were both the children of New Mexico Tech employees. When he was in high school, Matt explained, more New Mexico Tech employees lived in Socorro than today. "Well, and the other thing back at that time, a lot of the faculty wives had degrees, but not, generally, a job at Tech, so they were teaching [in Socorro schools]. So we did have quite a few good teachers in schools that were, you know, faculty-related."

Doc and Jean's youngest child, daughter **Margaret Stanley-Gonzales** who was born in Ireland, chose to pursue a degree at New Mexico State University, thanks to a golf scholarship. She later became the golf coach at Socorro High School for several years, and received the 2013 "National Coach of the Year" award from the National Federation of High School Coaches Association. Margaret and her husband Robert (a Texas A&M grad and former NMT employee) live in Peyton, CO.

### THIRD GENERATION

Mike and Meri's daughter **Laura (Stanley) County** (B.S. 2010, Biology), felt as though there was quite a journey from when she studied at NMT to her present job in optometry. "It's been a long time since I've been at Tech, but Tech itself is challenging. And I think it prepared me really well for the rigors of optometry school, which is good. Just how many hours you have to put into studying. And to get to a professional school and then have coursework that's above and beyond anything I ever took at Tech, but have the know-how to make it work or be successful was really helpful."

Laura planned to become a pharmacist when she started at NMT, but changed her focus to optometry. With that change came a move from chemistry-driven to biology-driven studies. Laura found that she drew from



Doc Stanley, 2020 President's Golf Tournament

the engineering students as well. "It was interesting to see more of the engineering side of things when I was doing more of the medical side of things. So it was kind of cool to just expand my knowledge."

Laura's husband, **Erik County** (Bachelor of General Studies, 2005, and B.S. 2006, Management), worked at NMT from 2005 - 2012, and returned to NMT in 2017 when they moved back to Socorro. He is now Director of Business Processes in the Finance & Administration division.

For Laura, the move back to Socorro after completing her O.D. at the University of Houston College of Optometry was an opportunity to maintain her optometry practice in a place that allowed her to be close to the tightly-knit Stanley family. "We weren't going to come back, but we realized that having two babies and not having family support was really difficult. Growing up next door to my grandparents and having family in the area was a really special experience for me, and I wanted that for my kids. Around the same time we realized all that, the eye doctor here in town closed his office, so we just saw an opportunity and decided to act on it."

Meri and Mike's son **Brian Stanley** (B.S. 2013, Mechanical Engineering) currently lives and works in a suburb south of Denver, CO. After graduating from NMT, Brian decided he wanted more human interaction than he expected to experience as a mechanical engineer. In talking with his sister, Laura, Brian decided optometry would provide him with that human interaction. "Optometry is like engineering because it's so precise," Brian said, "It's why engineers can be challenging patients, but my engineering background allows me to connect with them. They want things more and more precise, you know? I ask, 'Is it better or worse?' They want something in between." He followed in Laura's footsteps and attended the University of Houston College of Optometry.

Brian described his time at New Mexico Tech as having a sense of closeness, albeit with a sense of humor. He fondly recalled time spent with roommates Omar Soliman (B.S. 2013 and M.S. 2014, Computer Science) and Alan Benalil (B.S. 2012, Electrical Engineering). He also recalled the infamous prank where a number of students who happened to be rock climbers mounted a green toilet on the Skeen Library tower.

For Brian, the connection his family has with the growth of EMRTC and New Mexico Tech, as a whole, has been a source of pride. New Mexico Tech, and more broadly mechanical engineering, were an influence on his approach to critical thinking and listening. Brian said he intends to eventually return to Socorro to work with his sister. It's another example of the magnetic pull of Socorro and New Mexico Tech on the Stanley family.

### **FUTURE GENERATIONS**

While the Stanley family is already packed with New Mexico Tech graduates (9 degrees total), Doc looks forward to more. "We hope there's going to be a fourth generation. There's four great-grandkids now," Doc said. The potential fourth generation represents a continuation of the family's commitment to Socorro and New Mexico Tech.

The Stanley family's success across diverse fields—from fundamental physics research, explosives research, and petrochemical engineering to mathematics, business management and clinical healthcare—demonstrates New Mexico Tech's rigorous STEM training has provided a robust foundation for generations of alumni to adapt to a variety of career paths while contributing meaningfully to their communities.

### NMT LEGACIES: TWO GENERATIONS – TWO FAMILIES

By Nancy Bilderbeck, (B.S. 1976, Biology)

My husband, Mitch Bilderbeck (B.S. 1977, Petroleum Engineering), and I transferred to New Mexico Tech from the University of New Mexico in 1974 to start our Junior year. We found UNM impersonal. My husband claims he majored in basketball there, playing pick-up games in Johnson Gym for two years. But we were not the first, or the last, of our family to be associated with NMT.

My sister, Dr. JoAnne Allen (B.S. 1974, Biology), was the pioneer! She "headed south" from Albuquerque in 1970. JoAnne, the only one to conquer M Mountain, became an award-winning dentist in Albuquerque following dental school at Baylor.

My mother, Theresa Johnson, received her Master in Science Teaching from Tech in 1975 and went on to be named Science Teacher of the Year in the Albuquerque Public School system. For years she ran the Regional Science and Engineering Fair and encouraged countless students (including my sister, my husband, and me), to go to Socorro with their projects.

On hearing of my mother's success, her nephew (my cousin), Richard "Dick" Guzowski, travelled from Massachusetts to complete the same Master in Science Teaching over a number of summers. He left with his degree in 1985 as well as an everlasting love of the Southwest and the Land of Enchantment.

My mother-in-law, Janet Bilderbeck, a high school teacher in the Jemez Valley School System, was a "dorm mom" during Tech's summer programs. These introduced New Mexico high school students to the collegiate system, NMT, and Socorro. Her duties kept her busy at night!

Over the years family gatherings were, and still are, punctuated by stories of NM Tech: my sister being 49ers Queen, the occasion of my mother-in-law jumping into a golf course pond to cool off, the Mineral Museum inspiring

my mother to specialise in Earth and Space science, the amazing array of sports including a "Run to the Owl Bar." Of course we reminisce about the rigours of the education, thankfully both supported and intimate, that led us all to successful and varied careers.

We have come to realise the importance that NM Tech played in our personal and professional lives. It is always a delight to visit the campus and see the changes and developments. Too, we are happy to "give back" annually. I would encourage you to do the same!



Janet and Nancy near the Colorado River in Arizona



Nancy returning to NMT to judge Nancy while at NMT, circa 1971 at the NM Science Fair in 2010





Mitch Bilderbeck 1976 Porphyry



**JoAnne Johnson Allen 1971** Porphyry



**Nancy Johnson Bilderbeck** 1976 Porphyry

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### NMT LEGACIES: TEN STUDENTS, SIX DEGREES

By Russell Erbes (B.S. 1969, Physics)





It all started in late 1964 when my mom spotted a postcard on the bulletin board at my local (Greeley, CO) high school that said, "Go to New Mexico Tech for Science." I applied and was accepted in what was then called the Co-op Program (you went to school year-round and worked 20 hours per week on campus).

I chose Tech for four reasons: (1) it was focused on science and I only had to take one year of English-most universities at the time required two years, (2) working in the Co-op program completely funded my education, (3) the professors, rather than TAs, actually taught the classes, even for freshmen, and (4) my Dad could drive to it in a day (one of my parent's requirements for where I went to college).

At the time there were about 300 students at Tech, only about 30 of whom were women. There were about 30 of us in the Co-op program.

I started Tech in June 1965, and my first summer school class was English (the last time I ever took an English class, although I did take Technical Writing). Most Co-op students began by working landscaping at the golf course, but I had accounting experience, so I ended up in the Business Office, manually balancing the checkbook. I worked there for a year before I got the chance of a lifetime: working for Charlie Moore on the fifth floor of the Research Building and Langmuir Lab during the summer.

While working at Langmuir Lab, I met my first wife, Peggy Demos, who was a year younger than me, and also a Co-op student. She initially majored in Physics, changed to Geology, and ultimately earned a B.S. in Nursing from the University of New Mexico.



Katya LeBlanc and Rob Erbes in 2015

Peggy and I married in January 1969. I graduated in May 1969 and joined the Navy as a Naval Flight Officer. After serving in the Navy I earned an M.S. in Atmospheric Science from Colorado State University in 1977 and spent most of my career as an air quality environmental consultant, retiring in 2013 as Chief Technical Officer at an engineering and environmental consulting firm.

Peggy and I had seven children together. Two of those children attended Tech: Robert Erbes (B.S. 2004, Information Technology and M.S. 2006, Computer Science with Information Technology emphasis) and Thomas Erbes (B.S. 2008, Chemical Engineering). Robert is a Distinguished Computer Security Researcher at the Idaho National Laboratory and Thomas worked at the Bremerton, WA Naval Shipyard in the Nuclear Propulsion Department.

Surprisingly, Robert did not learn a lot about NMT from his parents, but instead from his high school girlfriend who attended Tech to get a Materials Science degree. Ultimately, he chose NMT because the combination of



Peggy, Katya, Rob and Tom at 2004 Commencement

### NMT LEGACIES: TEN STUDENTS, SIX DEGREES







Russell Erbes in 2015

Russell Erbes at South Hall 1967

Tom Erbes 2008

the New Mexico lottery scholarship and an unheard of \$800-per-semester tuition, meant it was effectively free education. Thomas went to Tech because of his father and brother and it was "affordable with scholarships."

Robert ended up meeting his wife, Katya Le Blanc (B.S. 2005, Psychology), when she sat directly in front of him on the first day of Calculus I. Katya later earned a Ph.D. in Cognitive Psychology from New Mexico State University, and she is currently Director of Nuclear Safety and Regulatory Research at the Idaho National Laboratory.

Katya chose NMT as her mother Mary Rivera (1977-1979), father Lee Bergstedt (late 1970s), and stepfather Greg LeBlanc (1978-1981) all attended and spoke fondly of it. The family had since moved to Oklahoma and she wanted to be back in New Mexico. While Katya was at Tech, her brother Cedric (2002-2004 Physics) and her sister-in-law Darla Le Blanc (B.S. 2007, Electrical Engineering) also attended NMT. Darla now works for the Air Force at Tinker Air Force Base.

New Mexico Tech was a perfect school for me and I was very fortunate to have attended. I learned so much working for Charlie Moore. The Tech environment taught me the joy of science and provided me unmatched leadership opportunities. Plus, it was fun. I especially remember trying (and failing) to make homebrew, among other adventures.

Katya reflected that, "Tech is an amazing value, which I don't think I appreciated at the time I was there. The classes were small, everything but labs were taught by professors, and there was a really high educational standard. I got an incredibly solid scientific education at Tech which has helped me throughout my entire career."

One of Katya's memories that she still uses today when mentoring junior scientists was Professor Lynn Deming writing "BS" (be specific) all over the margins of her papers. Robert commented, "Tech is a small community of like-minded people, providing an excellent education and solid basis in the sciences that has been really valuable in my life."

Robert also really enjoyed being able to participate in events sponsored by local clubs. One of his favorites was the midnight hike up South Baldy sponsored by the local search and rescue group.

Although my oldest son Christopher did not attend Tech, after attending UNM he earned a Ph.D. in Psychology and worked for the VA, specializing in PTSD treatment and research. Unfortunately, he passed away in 2021 when he was just 49. In his honor, my six surviving children and I worked with NMT to establish the Dr. Christopher R. Erbes Memorial Scholarship for deserving Tech students.

Among my family and daughter-in-law's family there are two generations, ten students, and one memorial scholarship at New Mexico Tech. I currently have eighteen grandchildren and two great grandchildren. Grandpa is definitely encouraging a third NMT generation, and I would not be surprised to see a fourth or more generation at what I consider one of the best schools for science anywhere.

To support the Dr. Christopher R. Erbes Memorial Scholarship fund, scan the QR code or click on the Donate to the NMT Foundation button on the

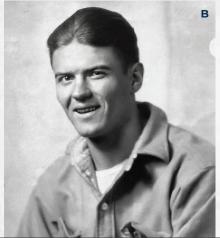
NMT Advancement website at www.nmt.edu/advancement/ and then scroll down the Designation list to Erbes.

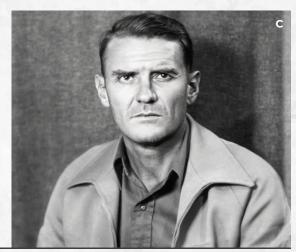


### NMT LEGACIES: ALL IN THE FAMILY

By Tom Scanlan (NMT 1955-1957)







Tom and Irene Irvin 1930s

Tom Bulloch Irvin 1925

**Tom Bulloch Irvin 1946** 

I should first credit my grandpa, Tom Irvin (1880-1945). He grew up in west Texas and worked with his dad and eleven siblings on several cattle ranches before marrying Irene Bulloch in Roby, Texas. They moved to Farmington, NM around 1908 to join Tom's father, Nathanial, who moved there with most of the Irvin family in 1906 (Photo A).

Grandpa Tom's son, named Tom Bulloch Irvin, graduated Farmington HS in 1920 and then attended New Mexico



Young Tom Scanlan atop cable tool rig 1946



Paul Brink NMT admission photo 1949



Tom Scanlan growing a beard for 49ers 1955

School of Mines until 1923, majoring in mining engineering (Photo B). From there he worked in South America and then the Philippines until his internment by the Japanese from 1942-45 (Photo C, post-internment).

Grandpa Tom's daughter Ruth (my aunt) married Nick Brink. Tom and Nick wildcatted together south of Bloomfield, NM (Photo D - I'm seated atop their cable tool rig). Nick and Ruth had a son, Paul, who joined the Marines in 1946 and then attended New Mexico School of Mines from 1949-1952 (Photo E), until his father Nick was killed in a gas tanker explosion and fire at a job in Utah. Paul later died in a 1954 airplane crash in Colorado while on a job with English Oil of Farmington.

Grandpa Tom's other daughter, Iris, married Fred Scanlan, a sailor, and had a son, me, also named Tom. I attended New Mexico Tech after my discharge from the Marines in 1955 (Photo F). I transferred to UNM, then University of Maryland, then San Diego State University, earning a B.A. (1959) and M.A. (1962) in Physical Science.

I did some radio astronomy research at the Naval Research Lab in Anacostia, MD, finished my degrees, did some research related to submarine detection at Naval Electronics Lab (San Diego, CA), and then taught physics and astronomy at Grossmont College near San Diego until retiring in 1991. Of all the places I studied, my fondest memories are from New Mexico Tech.

### WOMEN OF NMT: IN HER OWN WORDS

By Roslynd Archuleta (B.S. 1997, Biology)



Following the publication of the Winter 2025 Gold Pan, we received an email from Katharina Babcock, Forensic Lab Director at the New Mexico Department of Public Safety Forensic Laboratory (NM DPS FL) in Santa Fe, NM. She read the issue and recommended we reach out to one of her employees, Roslynd Archuleta, an alumna of NMT. Ms. Babcock noted, "Roslynd is one of a very few employees in the lab who is from New Mexico, attended school in New Mexico to pursue a science degree and stayed in New Mexico to work in science. Roslynd has worked some of New Mexico's highest profile cases involving forensic DNA analysis in criminal cases."

Fascinated, we reached out to Roslynd and – happily – she was enthusiastic about letting us share her story, in her own words.

### WHY BIOLOGY?

I chose biology as my major for several reasons – it came naturally to me, I understood it, and I genuinely loved it. I've always been fascinated by the biological processes that shape our world, and I happily "nerd out" over learning more.

When I was in high school, my mother became very ill, and I was deeply grateful to the medical team and lab professionals who helped diagnose the issue and help her to recover. That experience inspired me to pursue a career where I could help others in a similar way. I initially was aiming to work in a medical laboratory and found myself working in cytogenetics [the study of chromosomes, their structure, function, and behavior]. In time I found myself needing something different.

My father, who was then a retired officer, knew about my interest in forensics (he had even helped me set up a blood spatter science project in high school) and constantly encouraged me to apply for a position at the forensic lab. He believed in my abilities when I wasn't entirely sure of them myself. I can't thank him enough for that support.

# WHAT DO YOU APPRECIATE MOST ABOUT ATTENDING AND GRADUATING FROM NMT?

Every time I testify in court on a case I've worked on, I take pride in listing my qualifications. To my knowledge, I'm one of a few – if not the only – forensic scientists to have attended New Mexico Tech, and I proudly share that each time. My education at NMT opened the door to a world of possibilities, making science an integral part of my everyday life, and for that I'll always be deeply grateful.

One of my favorite classes was Genetics with Dr. Wing. The fruit fly labs were fascinating. It was also where I first learned about and performed gel electrophoresis. I still have that original gel image tucked into one of my old notebooks. At the time, I had no idea that this technique would become the foundation for building my career in forensics!

### WHERE DO YOU WORK? WHAT IS YOUR JOB TITLE?

I am now the Forensic Scientist Supervisor for the DNA Unit at the New Mexico Department of Public Safety Forensic Laboratory. I joined the unit in October of 2007 as a Forensic Scientist conducting DNA analysis. In June of 2024, I was promoted to Supervisor and I oversee the daily operations of the DNA laboratory. We currently have 15 DNA analysts in the section.

### WHAT DOES YOUR JOB ENTAIL?

I work on a wide range of cases submitted to the DNA section of our laboratory – from property crimes to violent offenses, including sexual assaults and homicides. Over 300 law enforcement agencies throughout the state of New Mexico submit evidence items to our lab for examination, and it's my job to evaluate those items to determine if they may contain biological material for DNA testing.

### WOMEN OF NMT: IN HER OWN WORDS





Roslynd Archuleta NM DPS Lab

**NM DPS Forensic Lab** 

In addition to evidence, law enforcement also provides reference samples from individuals associated with the case. I process those samples and then compare those DNA profiles to the profile from the item of evidence to determine if an individual is included or excluded as a potential contributor. I document my findings in a detailed report, which is submitted to law enforcement, and serves as a key piece of the investigation and subsequent court proceedings. I am frequently subpoenaed to testify in court as an expert witness regarding the results of my testing.

At any given time, I may be juggling multiple cases, each in different stages of the DNA testing process, and that's exactly what makes the work so compelling. There's never a lull in the DNA lab; it's fast-paced, demanding, and constantly evolving. Every case challenges me in a new way. That unpredictability and the ability to help further information in a case are what makes this career so incredibly rewarding.

We often see a snapshot of someone's worst day, and that reality can be mentally and emotionally challenging, but it's that aspect of the job which motivates me to do my absolute best. I hope that through my work, I can leave the world just a little bit better than I found it. I hope that the DNA testing I perform plays a meaningful role in helping to bring justice to families throughout New Mexico.

### HOW DID NMT HELP YOU FIND YOUR PATH IN LIFE?

I'm incredibly proud to say I attended a science-focused school of such high regard. My time there fueled my curiosity, kept me asking questions and pushed me to rise to every challenge. Earning my degree wasn't easy – there were plenty of tough days – but the determination it took made the accomplishment even more meaningful.

# WHAT DO YOU WISH YOU HAD KNOWN EARLIER ABOUT YOUR CAREER PATH?

This field has forced me to overcome my fear of public speaking, taught me to take full responsibility for my work, and to show up with dedication and confidence. Had I known how difficult this path would be, I might have chosen something easier and less stressful, but I'm incredibly thankful I didn't. I truly love this career, and I'm grateful for every challenge - even the ones that felt overwhelming at the time. Each day brings a new opportunity to grow and learn and I hope that never changes.

### THOUGHTS ABOUT BEING A WOMAN IN STEM?

One of my favorite parts of being a forensic scientist – when my workload allows – is attending career fairs. I especially love encouraging girls ranging in age from elementary school through college to explore careers in STEM. My hope is to inspire younger generations to pursue science – it fuels curiosity, keeps you asking questions, and allows you to learn something new every day.

STEM fields give women the chance to step into careers that have historically been male-dominated. This brings fresh perspectives, problem solving, and creative thinking to the table. Historically speaking, New Mexico Tech has consistently enrolled more male students than female students. This makes me especially proud to be a female graduate of such a rigorous science and engineering school.

### ANY ADVICE FOR CURRENT AND FUTURE NMT STUDENTS?

If I could give one piece of advice, it would be: don't let the hard days define you. It's completely normal to feel overwhelmed at times, but don't give up. Never let anyone – not even your inner voice – convince you that you can't do it. Prove them wrong and show them what you're made of! (And don't stress TOO much if you sleep through your alarm before your calc test...there's usually a way to fix such a blunder! Ask me how I know....)

Learn more about the Forensic Laboratory and virtually tour their amazing new lab at https://www.dps.nm.gov/forensic-lab/.

### **2025 PRESIDENT'S CLUB RECEPTION**

### CELEBRATING GENEROSITY: HONORING DONORS AND \$91M CAMPAIGN COMPLETION

The 2025 President's Club Reception welcomed New Mexico Tech's most committed supporters for an evening of appreciation and reflection. Set against a backdrop of elegance and springtime blossoms, the event offered a sincere thank-you to donors who contributed in 2024, celebrating their generosity and continued belief in NMT's mission.

This year's reception also marked the successful close of the Launching Tech to New Heights campaign, which raised an impressive \$91 million in cash, pledges, and planned giving in support of student scholarships, groundbreaking research, faculty excellence, and campus improvements. The milestone was a testament to the



Guests listen attentively as President Amouzegar shares his gratitude and reflects on the success of the Launching Tech to New Heights campaign.



President Amouzegar shares a moment with Bob Casillas and Nicholas Caine of Stifel Public Finance, two valued partners in Tech's continued growth.

powerful impact of collective giving.

To receive an invitation to future President's Club Receptions, donors must contribute \$1,000 or more during the calendar year prior to the event. This exclusive evening is our way of recognizing those who help elevate New Mexico Tech to new heights. If you would like to be part of this exclusive club, please reach out to

Colleen Foster at 575-835-5352 or email colleen.foster@nmt.edu.



Presidential Ambassadors and student club volunteers warmly welcomed guests and assisted throughout the evening. Back (L-R): Christopher Beall, Adam Murrell, Ivan Watchman, Ethan Jones, Jacob Hill, Dylan Sarracino; Front (L-R): Carl Berni, Joel Rodriguez, Nomar Roman





### FIND CURRENT AND ARCHIVED GOLD PAN MAGAZINES HERE



https://nmt.edu/advancement/gold\_pan.php

### **PEOPLE YOU KNOW**

### NIRUPAM CHAKRABORTI



(M.S. 1979, Metallurgical Engineering) is now listed as "Highly Ranked Scholar - Lifetime" in the highly prestigious Scholar GPS ranking. In Genetic Algorithm, his area of research, Nirupam is now #16 in the world. He has also just been appointed editor-in-chief of Philosophical Magazine Letters. He is currently a Visiting Professor at Czech Technical University in Prague.

### DIANE HATTLER

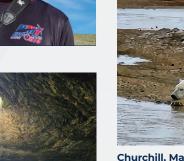


(B.S. 1985, Geology and Technical Communication) I am retired! During my career I worked as a Technical Editor at the US Geological Survey in Reston, VA for two years, then transferred to southern Nevada and worked as a Technical Writer and then field geologist for SAIC on the Nevada Test Site on the Yucca Mountain Project. In 1995, they laid off most of us and I moved to Virginia and went to graduate school at Marymount University where I earned an MBA and an international business post-graduate certificate. Then I earned a master's in clinical psychology and became a licensed professional counselor (LPC), specializing in trauma and abuse and loss and grief. I worked with teenage girls the majority of my counseling career. I worked a year with the poor and homeless, six years in private practice, and the rest of my career for Fairfax County Community Service Board working with kids and teens in assessments and in two different group homes over the years. While earning my two masters degrees I worked as a substitute teacher, teaching earth science and computers, and then as a relief counselor. I retired September 2023, focusing on genealogy and family history.

### WILLIAM "BILL" MARBLE



(B.S. 1973, Petroleum Engineering) He and his wife Katie have been enjoying a wide variety of travel in 2024 and 2025. They have been to Chile, Manitoba, Spain, Alabama, Florida, and on a Disney cruise. Their upcoming trips include a Nile River cruise (Thanksgiving) and a safari by jeep through Tanzania during calving season in December. As Bill says, "All just a part of our effort to spend our children's inheritance. None of our trips are for our personal enjoyment!"



Churchill, Manitoba polar bear – we saw 24 over three days there



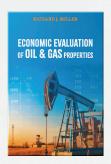
Roman aqueduct in Segovia, Spain



Disney Cruisin' with our 3 ½ year old grandson (tenth grandchild)

Kate behind Noccalula Falls. Alabama

### RICHARD J. MILLER



(B.S. 1967, Petroleum Engineering) is the author of "Economic Evaluation of Oil & Gas Properties," published in May, 2025 by Pennwell Books. Drawing from his 50+ years of industry experience, this book covers core concepts, practical applications, and economic benefits.

### ANTHONY MONTOYA, JR., PE, CFM



(B.S. 2002, Electrical Engineering), has been named the 2025 Engineer of the Year by the New Mexico Society of Professional Engineers. Anthony serves as Chief Engineer for the Albuquerque Bernalillo County Water Utility Authority.

### STAVROS PAPADOPULOS



(M.S. 1962, Hydrology) was selected as the 2024 recipient of the M. King Hubbert Award from the National Ground Water Association (NGWA). This award is presented to a person who has made a major science or engineering contribution to the groundwater industry through research, technical papers, teaching, and practical applications.

### DOUG TAYLOR



(B.S. 1989, Materials Engineering) Earlier this year I was recognized as a Fellow of ASM International. The NMT Materials and Metallurgical Engineering Department still has an active ASM Student Chapter with which we partner. I have also been a member of the NMT Materials Department's Advisory Board for over 25 years. I have been working at Sandia National Labs for the past ten years and am the Manager of Explosives R&D.

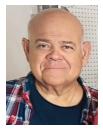
### DAVID "JESS" WRIGHT



(B.S. 1998 Chemistry) I wanted to share with the old Pygmies/Techies that I retired from the military after 25 years of service (Marines and Coast Guard). For the last two years I have been a civilian instructor pilot for the Coast Guard in Mobile, AL, teaching the next generation to fly helicopters. My wife Anne and I have been fostering dogs and run a funny farm full of chickens, alpacas, horses, dogs, cats, and a turkey. I sell eggs and Anne keeps promising to package up the Alpaca fiber to sell to offset their feed bills. I still attempt to play basketball a couple of times a week and delude myself with thoughts of trying out for an old boys' rugby side. I am happy in my post military life to continue flying helicopters—and if I were wealthy, I would want to do the same thing—just on my schedule. Thank you to NM Tech, the faculty, and foremost to my collegiate friends who continue to be a source of strength in my life. The life lessons from the Pygmies and the camaraderie of a somewhat wild youth spent at Tech hold a special place in my spirit and heart.

### IN MEMORIAM

### Rudy Paul Chavez



(1981 B.S., Biology with Environmental Science Option), born November 20, 1959, passed away on July 17, 2025. Paul loved the time he spent at NMT; he said it was the happiest time of his life. He started his freshman year as a Premed major and the following year changed to Biology with Environmental Science option. After graduation, Paul was able to mentor several students and continue to attend activities like 49er's celebrations. He was known as a fun-loving crazy guy with a sharp mind and even sharper wit.

Dr. James Brierley, his advisor, quickly became his mentor and lifetime friend. Jim and his wife, Dr. Corale Brierley, noted, "When [we] launched [our] start-up company, Advanced Mineral Technologies, and were seeking enthusiastic and skilled employees, Rudy was an obvious choice. He had a strong work ethic, was a team player, was already knowledgeable with the technology of applying microbiology for extracting metals from ores and wastewaters and possessed a degree from the best small college in the nation. Rudy moved with us and our close-knit team of employees to Golden, CO in early 1983. We are privileged...to have known Rudy as the gentle and compassionate individual that he was."

In 2001 Paul took a job as Safety Director for Evergreen Caissons, Inc., a powerline foundation drilling contractor. Paul was a steadfast champion of jobsite safety and a tireless advocate for worker wellbeing. Paul devoted nearly two decades to cultivating a culture of care, vigilance, and excellence in high-risk environments. He was a certified trainer in CPR, first aid, and OSHA. Paul's initiatives elevated safety from a checklist to a collective responsibility, and his legacy lives on in the framework, values, and everyday habits of those he trained. Known for his calm leadership, strategic thinking, and deep empathy, Paul earned the trust of both executives and field workers alike. Paul will be fondly remembered by the many people whose lives crossed with his.

### Charles E. Mandeville



(1969 B.S., Petroleum Engineering) passed away on June 20, 2025. He was born in Pennsylvania on July 14, 1947, and spent time growing up in Alabama and Kansas while his parents moved the family around the country for professorships and other work.

Charles moved to Socorro to attend New Mexico Tech where he met several life-long friends and obtained his B.S. degree. He married, had two children, moved to Texas and began working as a Petroleum Engineer for Texaco. Several years later, he moved back to Socorro with his family as owner of the South Socorro Texaco service & gasoline station in the mid-1970s. With financial assistance from his parents and a coin collection built over several decades as collateral, Charles was able to secure a loan to purchase the abandoned Val Verde Hotel in 1977. He worked tirelessly, along with many others, to rehabilitate the Val Verde into a thriving business, with a grand reopening in 1985.

Charles pursued many hobbies and interests including, but not limited to, camping, the Vigilante Band, counter-culture music, cassette tape collecting, the Mugwumps softball team, and many more. Later in life, he took up metal detecting, artifact hunting,

rediscovered coin collecting, antique arms collecting, New Mexico history (including Civil War history in New Mexico), and Civil War re-enacting, including the famed Battles for Socorro, re-enacting the Battle of Valverde and Capture of Socorro for several years in February. Charles is survived by one son (Cinco), two daughters (Debby & Lizi), one sister (Jill), eleven grandchildren, and two beloved cats.

### Philip Kozushko



(1983 M.S., Mining Engineering and 1985 B.S. Petroleum Engineering), affectionately known as "Miner Phil," passed away on May 3, 2025, in Las Cruces, NM. Born on August 5, 1947, in Trenton, NJ, Phil earned his B.S. in Geological Engineering from the South Dakota School of Mines in 1969. He began his career working in the uranium mines of Grants, NM, where he met his wife, Virginia. They were married for 46 years, raised a son and a daughter, and eventually settled in Socorro, NM in 1980 when Phil enrolled at New Mexico Tech.

Phil's legacy at New Mexico Tech is nothing short of legendary. After earning his M.S. and B.S., he began a career at NMT of more than 30 years of dedicated service. He served in several roles, including at TERA/EMRTC, as the New Mexico State Mine Inspector in 1994, and as an adjunct professor in the Mineral Engineering Department.

Known for being very social, having boundless enthusiasm, with an endless trove of mining stories, Phil became a legend on campus—sharing his passion for mining history, mining stickers, and minerals, with students, friends and colleagues alike. One of his proudest accomplishments was restoring three historic mines: the Waldo Mine in Magdalena, and the Merritt and Cottonwood mines on 'M'

Mountain. He collaborated with students and staff to open the Waldo Mine for historic tours during Magdalena's annual Old Timers' Reunion, curating displays inside the mine with antique mining artifacts from his own collection. These efforts created a one-of-a-kind mining experience that captivated both students and visitors.

Phil is survived by his beloved wife, Virginia; his daughter Alicia and son-in-law Chris; his son Harley and daughter-in-law Lynn; and three cherished grandchildren. His legacy lives on in the family he loved, the students he inspired, and the New Mexico mining history he helped preserve.

### Darby Patrick Stirrup

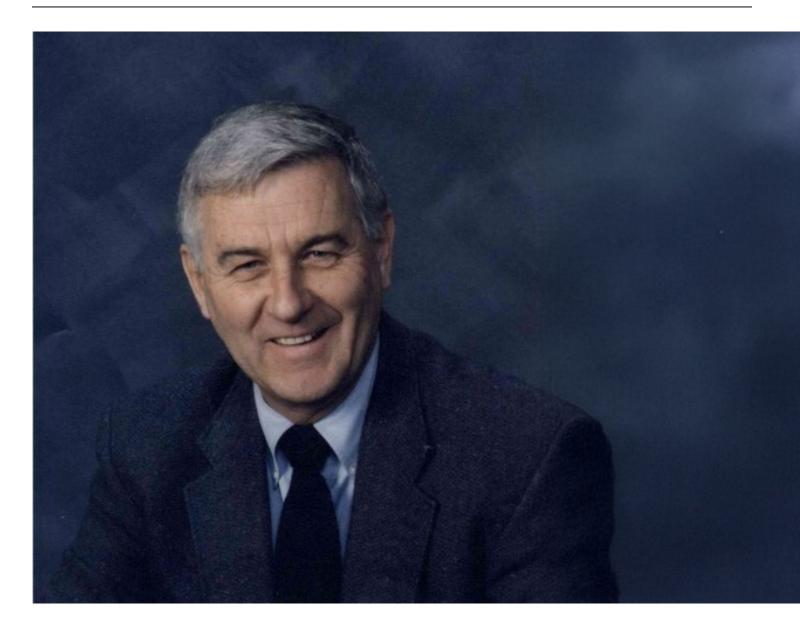


(December 2023 B.S., Mechanical Engineering) unexpectedly passed on June 7, 2025. Born October 4, 2000, Darby was the third child and only son of Barbara Darby Serna and Timothy Stirrup. He grew up in Corrales, NM, where he was a proud member of Boy Scouts, nurturing a strong sense of independence and an obsession with the Pinewood Derby. Darby also played soccer and baseball and developed a lifelong passion for medieval battles and military history. He was deeply involved in extracurricular STEM activities in high school. While at New Mexico Tech, he was an active member of the Baja SAE Club, competing in off-road vehicle design competitions. The Baja Club has announced that next year's car will be named "The Darby" in his honor.

Following graduation, Darby moved to Aiken, SC to build his professional career as a Shift Technical Engineer at the Savannah River Site. He supported the Saltstone Processing Facility and took pride in his work. He had the mind of an engineer and was carving out a future full of promise, purpose, and quiet determination. Darby is survived by his mother Barbara Serna (1989 B.S., Technical Communication) and her partner Terry Cooper; his father Tim Stirrup (1988 B.S., Chemistry, and 1989 B.S., Biology) and his partner Kelsey Forde; sister Emily Alcorn (2017 B.S., Chemical Engineering) and her husband Sean Alcorn; and sister Kerry-Ann Stirrup (2019 B.S.,

Materials Engineering). Darby was an extraordinary person: kind, curious, and deeply loved. With a dry, witty sense of humor, he had a way of making people laugh without ever cracking a smile himself. In lieu of flowers, the family requests that donations be made in his name to the Epilepsy Foundation at www.epilepsy.com.

### DR. WILLIAM "BILL" LYONS, P.E.



Dr. William "Bill" Lyons, P.E., passed away on July 29, 2024. From 1977 through 2006 he was a New Mexico Tech professor in Petroleum Engineering and Mechanical Engineering. Many Techies attribute the creation of the Mechanical Engineering department to Dr. Lyons. He also served two one-year tours as a Distinguished Visiting Professor in Mechanical Engineering at the U.S. Air Force Academy and was most recently the owner of LEA Energy Consulting in Overland Park, KS.

His family are working to establish an endowed scholarship at NMT in his honor. The Dr. William C. Lyons Scholarship will benefit students choosing careers in Mechanical Engineering or Petroleum Engineering. Since endowed scholarships are designed to last in perpetuity, there is no better way to memorialize this great man, teacher, friend, and father than by creating something that will keep his memory and legacy alive. He would be touched to know that his sons and former students are assisting more young people on their paths to exciting careers in his honor.

To join your fellow Techies in commemorating him you can donate by clicking on the Give button at the top right on the NMT website at https://nmt.edu/ and then scrolling down the Designation list to Lyons or scan the QR code.



### **ACADEMIC YEAR 2025**

**TOTAL VISITORS** 

AVERAGE WEEKLY VISITORS



TOTAL POUNDS GIVEN



AVERAGE MONTHLY POUNDS GIVEN



AVERAGE POUNDS PER STUDENT



AVERAGE NUMBER OF ITEMS TAKEN PER STUDENT



774 25 6995 790 8 9

### SUPPORT THE NMT FOOD PANTRY

You can help make hunger one less worry for NMT students. Donate today and double your impact through our \$10,000 matching fund opportunity.

To give by check make check out to New Mexico Tech, add "NMT Food Pantry" to the memo line. Mail to: Office for Advancement, 801 Leroy Place, Socorro, NM 87801





Office for Advancement 801 Leroy Place, Socorro, NM 87801 575-835-5352 advancement@nmt.edu

# BENEFITS OF MAKING AN IRA CHARITABLE ROLLOVER GIFT TO SUPPORT NMT



Reduce your taxable income, even if you do not itemize deductions.



Make a gift that is not subject to the deduction limits on charitable gifts.



Use your rollover to make payments on an existing pledge.

### IT'S EASY TO DO!

Instruct your retirement account custodian to send any amount (up to \$100,000) to NMT Foundation this year. NMT Foundation is tax-exempt so there is no tax paid on the transfer. Your gift goes straight to work for NMT and NMT students.

### Create Your Legacy With An IRA Charitable Rollover Gift

If you are 70 1/2 or older, you can use your individual retirement account (IRA) to support New Mexico Tech.

Please call or email to learn about how you can create your legacy by making an IRA charitable rollover gift this year.

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https://nmt.edu/advancement/gold\_pan.php



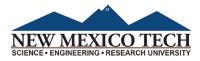
# SEPTEMBER 18 & 19





Dr. Jackson continues the 32-year tradition that has helped more than 350 students complete their education at New Mexico Tech.

Proceeds go to support students' scholarly endeavors and the creation of additional resources to support the mission of the University. https://www.nmt.edu/advancement/golf-tournament.php



### New Mexico Institute of Mining and Technology

Office for Advancement and Alumni Affairs 801 Leroy Place Socorro, NM 87801

www.nmt.edu/advancement/gold\_pan www.nmt.edu/advancement www.nmt.edu

advancement@nmt.edu

