

*Graduation, 2016*

## A word from the director . . .

# Greetings!



*Colleen Guengerich-Foster*

Hello Techies!

It is that time of the year again. Tech is launching more than 300 science and engineering graduates out into the world, and in a few months another set of incoming Freshmen will arrive on campus full of excitement, puzzlement and maybe even trepidation about what their next several years will be like at NMT. Do you yet remember driving to Tech at the beginning of your freshman year? Or how daunting and smart all the “more experienced” upper class students seemed to you? If you have any good stories, please share them with us.

Commencement season reminds me of the constant change we in higher education endure. At the most basic level it's the change that results in doing our jobs right — educating bright young minds and sending them into the world. When we are successful, students

graduate and leave and another young crop comes to fill their seats in Workman 101.

This year we are anticipating even more change. June 30, 2016, marks the end of President Daniel López's 23 years as President of New Mexico Tech. I cannot begin to list the changes and improvements that Dr. López oversaw during his presidency, because they number too many. Under his sure hand the campus has blossomed, more buildings have been erected and the school itself made it through many tumultuous financial years due to his steadfast knowledge. He will be missed.

Dr. Stephen Wells will take the helm as president on July 1, 2016. He brings 17 years of experience from the Desert Research Institute in Nevada. His wife Beth has been actively involved in STEM outreach for K-12 in their community. A new president's residence will be under construction as well. It will be built in the shaded area between the current house and the NRAO parking lot. The Tech community welcomes Dr. and Mrs. Wells.

Change is constant and change is good. Please join us in welcoming Dr. and Mrs. Wells to our family!

Warmly,

Colleen Guengerich-Foster  
*Director*  
*Office for Advancement and Alumni Relations*  
*Executive Director*  
*New Mexico Tech Research Foundation*



inside

# GOLD PAN

ALUMNI MAGAZINE

## TABLE OF CONTENTS

### DEPARTMENTS

- 02** FROM THE DIRECTOR
- 12** STUDENT RESEARCH Rocket Launch
- 20** STUDENT SPOTLIGHT K. Ryder Fox
- 25** ALUMNI LETTER
- 26** ALUMNI SPOTLIGHT Don Tripp
- 34** PEOPLE YOU KNOW
- 38** IN MEMORIAM
- 43** THE LAST WORD Isabella Dewers

### FEATURES

- 04** FAREWELL TO DR. LÓPEZ
- 09** WELCOME TO DR. WELLS
- 18** CONSTRUCTION UPDATE
- 23** ALUMNI RECEPTIONS
- 24** STUDENT AFFAIRS OFFICE
- 30** GRADUATION 2016
- 32** AWARDS

*Gold Pan is published by New Mexico Institute of Mining and Technology (New Mexico Tech) for alumni, faculty and friends, by the Office for Advancement and Alumni Relations, 801 Leroy Place, Socorro, NM 87801.*

**Editor and Writers**  
Colleen Guengerich, *Editor*  
Valerie Kimble, Thom Guengerich

**Design**  
Edie Steinhoff

**Photography**  
Thomas Guengerich,  
Edie Steinhoff, Webb Photography

**Administration**  
Dr. Stephen Wells  
*President*

Dr. Warren Ostregren  
*Vice President for Academic Affairs*

Melissa Jaramillo-Fleming  
*Vice President for Student and University Relations, Dean of Students*

Richrd Cervantes  
*Vice President for Administration and Finance*

Dr. Van Romero  
*Vice President for Research and Economic Development*

**Alumni Relations Office:**  
Colleen Guengerich  
*Director*  
575.835.5352  
[colleen.foster@nmt.edu](mailto:colleen.foster@nmt.edu)

Heidi Brown  
*Associate Director*  
575.835.5292  
[heidi.brown@nmt.edu](mailto:heidi.brown@nmt.edu)

Kiane Pound  
*Development Coordinator*  
575.835.5618  
[kiane.pound@nmt.edu](mailto:kiane.pound@nmt.edu)

LaVern Robinson  
*Administrative Coordinator*  
575.835.5616  
[lavern.robinson@nmt.edu](mailto:lavern.robinson@nmt.edu)

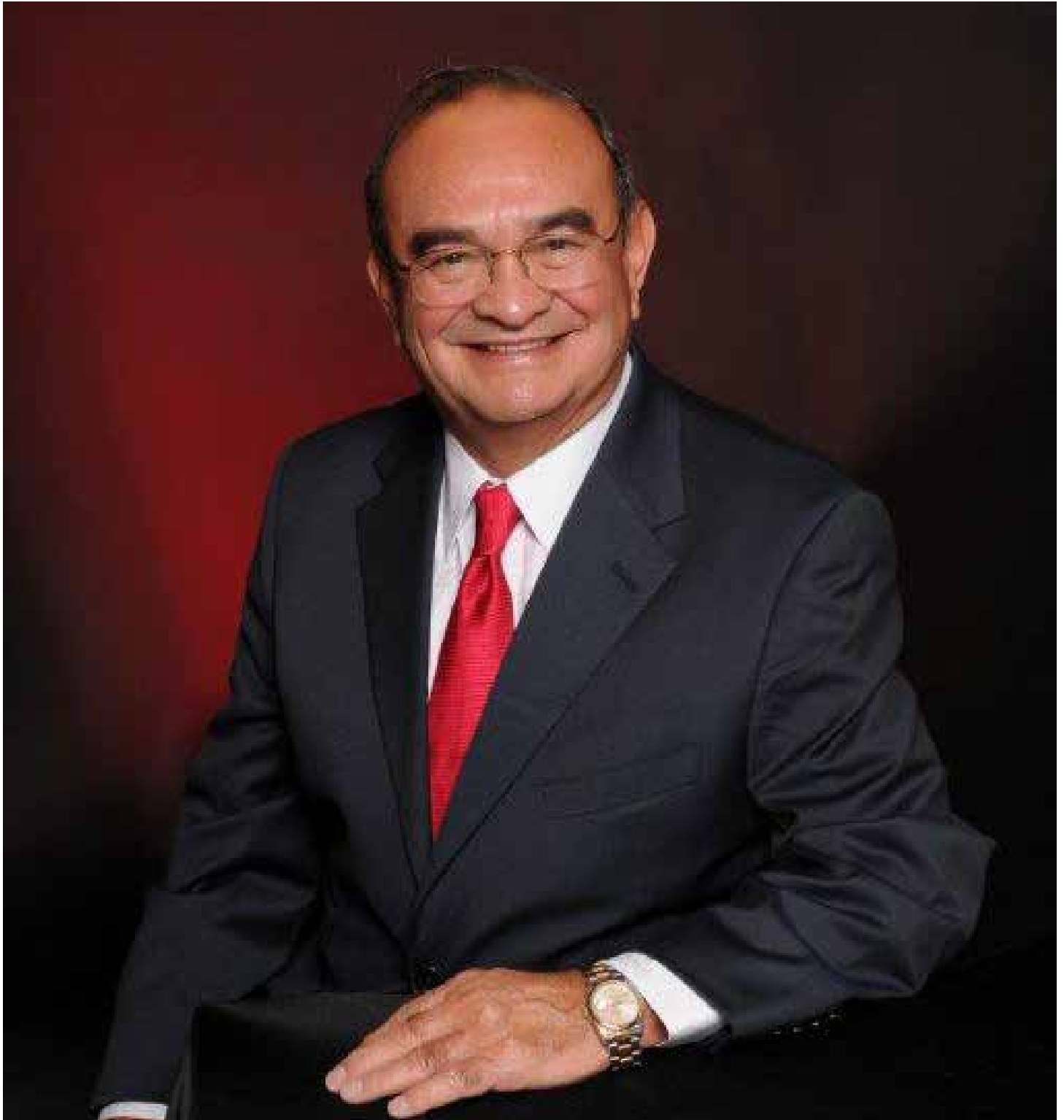


Dr. López receiving the Outstanding Leadership Award

<http://www.nmt.edu> • 1.800.428.TECH (8324)

*New Mexico Tech is an equal opportunity/affirmative action institution.*

# farewell to president lópez



The day dawned bright with promise. The birds were chirping and the meticulously manicured grassy lawns would soon be filled with the New Mexico Tech graduating class of 2016, their families and friends. Everyone arrived dressed in their celebratory best, many sporting the long black robes which symbolized their passage into the “real world” or marked another milestone in their higher education journey.

For one man, recognizing the largest graduating class in Tech’s history not only heightened his institutional pride, but also evoked many bittersweet feelings as well. May 14 marked the final commencement Dr. Daniel H. López would preside over following his 23 years at the helm of our university.

Monumental joy was the prevailing emotion for Tech’s longtime leader as he watched another generation of young men and women walk across the makeshift stage.



Dr. López receiving the Distinguished Service Award from Paul Shoemaker, President of the Alumni Association

Within the ceremonious moments of hand shaking, pomp, and recognition, the graduates were undoubtedly reflecting on their time at Tech and dreaming of their futures.

López, too, is looking ahead.

As he prepares for a new chapter of his own life, he must reflect on the near quarter-century spent in service as the longest-serving president in New Mexico Tech’s glorious history.

*How do you feel as you prepare to leave New Mexico*

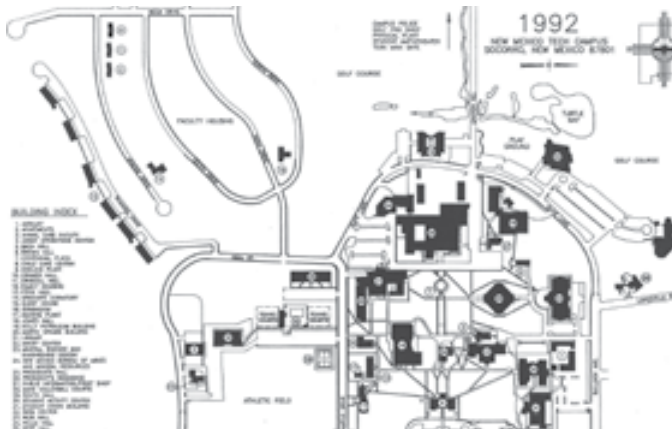
*Tech after all this time?*

“The most fundamental feeling is excitement for an incredibly rewarding career. I have worked for 44 years at a lot of jobs without any real interruption,” he said. “To cap off these years with one of the most exciting jobs I could have ever had, is something I treasure. There is excitement in a place where people are constantly questioning their basic understanding of complex problems, establishing fundamental principals in advancing knowledge in pursuit of a more perfect union.

“I told a story at the President’s Dinner (in April) that encapsulates this concept. I was out one night star-gazing with two friends, one a former college president and the other a top administrator. The former president, gazing upward, said, ‘Isn’t this a wonderful world?’ The other friend said, ‘No. I think it’s a world full of wonder.’

“That’s true of New Mexico Tech: It is a world full of wonder.

“There is wonder in how the students got here, and how they advance through program requirements and how, many of them, used that knowledge to become community leaders and others making significant contributions to society. Then there is the wonder of science itself, from medicine, chemistry, computer science – the whole range of the curriculum – with new discoveries and methodologies being developed at every turn. “I wonder at the hard work the staff brings to our community of scholars,



New Mexico Tech Campus in 1992 and 2015, before the construction of the chemistry building

working together toward one end, then helping guide students to become part of a larger community after they graduate. These thoughts, among many others, are what have propelled me through the 29 years I spent at New Mexico Tech, 23 of them as president.

“The challenges were many, the solutions rewarding. These concepts leave me with a sense of wonder in how things came about to such a satisfying resolution,” he said.

### *a lasting legacy*

In his own words, López categorized “some of what I leave behind”:

- Progress that has broadened the curriculum of

programs at both the undergraduate and graduate levels, making Tech able to compete to attract top students. This progress includes expanding offerings in new engineering programs, adding to our offerings of graduate degrees in the sciences and engineering fields to ensure opportunities as many address the needs of economics of New Mexico and the country.

- I was able to run the institute for almost a quarter of a century with a strong financial base, clean audits throughout my administration, and, most important, to have avoided layoffs even as we delivered a quality program to all our students.

- An almost complete transformation of the physical campus. If a building was razed, a new one was constructed. And we refurbished or remodeled many buildings from the ground up. We celebrated the ground-breaking for a new building for the Chemistry Department on March 21. Another major project in progress, the remodel of Jones Hall, is dependent on voters passing a statewide General Obligation Bond series on the general election ballot in November. New Mexico Tech’s share would be \$5.5 million. Some of the physical transformations on the campus are not

as visible, such as the hot water loop project and HVAC upgrade at Macey Center, “silent” upgrades that support the infrastructure that sustains the campus grounds to create an inviting milieu for students, their families, community visitors and for the people who work here, to provide them with a comfortable and safe environment.

- Increasing research funding. When I took over as president, I believe the University had \$17 million in research contracts; at its peak, research funding hit the \$100 million mark. The 2008 recession has reduced federal contract funds, but new projects under

way are slowly raising the bottom line. This has been a team effort with and through the research arm of the University. As president, I had a role, and the N.M. Legislature also had a role, in particular regarding special projects important to New Mexico Tech, such as:

- o The MRO [Magdalena Ridge Observatory],



President López and HRH Prince Andrew at the Magdalena Ridge Observatory site

- o Playas [Training and Research Center],
- o IRIS-PASSCAL [The Incorporated Research Institutions for Seismology (IRIS) Portable Array

- Seismic Studies of the Continental Lithosphere (PASSCAL) Instrument Center],
- o the Air Force Research Laboratory in Albuquerque,
- o and generally improved support for the University's research and public service projects.

These projects, inclusively, have contributed to higher student persistence and graduation rates. For example, 70 students matriculated and worked at the MRO, and all 70 graduated. I believe their research experience with MRO led to greater maturity, kept them on track and increased their understanding of science.

- New Mexico Tech's transformation into a state-centered University. When I arrived, the majority of undergraduates were from out of state. Today, that trend has reversed, with about 75 percent of students from New Mexico. At the same time, the quality of our students remains high; i.e., the average ACT



Dr. López presided over the largest graduating class in New Mexico Tech history in 2016

scores were around 26 – 27, rankings that continue today, along with a constantly maintained average GPA of 3.6. The percentage of Hispanic students has grown from 8 percent of undergraduate enrollment when I became president, to an average of better than 26 percent. Women also comprise a higher percentage of students and now average about one-third of total enrollment.

- These factors have made New Mexico Tech more representative of the state of New Mexico and the taxpayers who support it. Along these lines, we've been fairly successful in cultivating a better working relationship between

New Mexico Tech and the Socorro community. Outreach efforts continue statewide through programs such as the N.M. Science and Engineering Fair and Science Olympiad. National outreach includes a summer science program whereby top students from throughout the country come to campus anchored to a specific project. We also enjoy enhanced relationships with the state Legislature, federal agencies and Congress. Our ability to reach out for support from these entities benefits the state in general and New Mexico Tech in particular.

- Growth of the student body. New Mexico Tech

graduated its largest class to date – 305 students receiving baccalaureate, masters and doctoral degrees [this year], bringing the total number of graduates to 8,359, 3,163 and 448 respectively in the Institute’s 127-year history. Twenty-five years ago, enrollment hovered under the 1,000 mark, and today that number has more than doubled. Included in this category are the project-based Living/Learning Communities which have boosted student retention and persistence.

- The level of research activity remains cutting-edge in exploring the frontiers of science and engineering, as exemplified by the University’s high ranking in competition with top schools in the country. Pending patents have the potential for commercial success. Two related ventures into entrepreneurship are the Center for Leadership in Technology Commercialization and the inaugural Inventors &

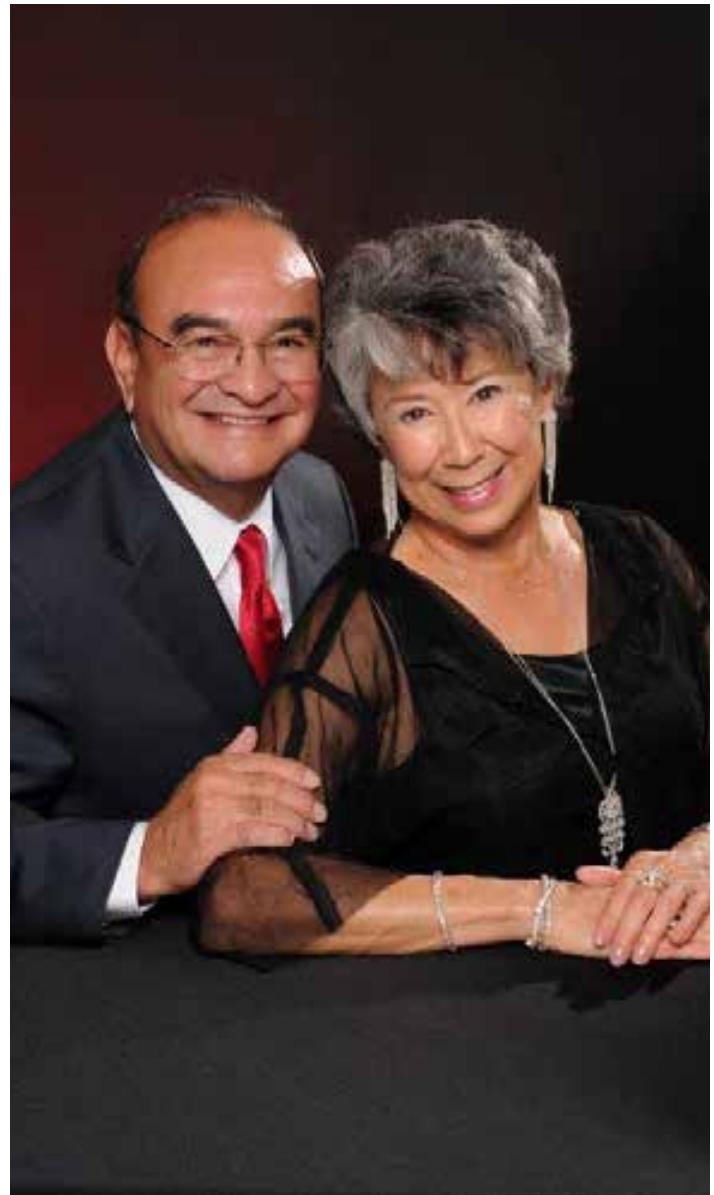
Entrepreneurs Workshop, which was deemed an overwhelming success.

### looking forward

The Commencement stage has been dissembled for another year, and gone are the bleachers and white tent. Over in Brown Hall, President López is packing up plaques and other personal mementos accrued during his administration to make way for his successor.

“I intend to stay very active as a consultant with a private company to further develop new business, and my legislative work will continue,” he said. López is also considering partnering with a close friend to help companies relocate to New Mexico. In the meantime, he plans to serve in a consultative role to the University’s 17th president, Dr. Stephen Wells.

“In short, I won’t be sitting around watching television or playing golf,” López said. “And of course I still intend to support New Mexico Tech – it’s been home for 29 years, and I



Dr. Dan López and Linda Vigil López

leave with a totally positive feeling.

“I’ve made some great friends,” he added. “And I’ll miss the students, their enthusiasm for discovery

and the satisfaction of watching them find their own place, their own bliss.

“To each of them I want to say, ‘Try to keep the dream alive.’”



# welcome to president wells

## profile of dr. stephen g. wells

When he assumes the role of president at New Mexico Tech this summer, Dr. Stephen Wells will be fulfilling several personal and professional goals. A former University of New Mexico geology professor, Wells is very familiar with the local culture, people, landscape, and the cuisine.

Asked what he most anticipates about returning to New Mexico besides the job, he quickly replied, “The food – the green and red chile. We really love the food in New Mexico.” Wells and his wife Beth have faithfully returned to New Mexico almost every year to visit friends and enjoy some of their favorite dishes.

“We love cultural diversity and we’ve missed it,” he added. “Even though we’ve lived in California and Nevada, there’s a great blend of cultures in New Mexico that we really look forward to getting back to.”

Wells said he’s looking forward to helping New Mexico Tech fulfill its mission and he wants to get to know the people of the university and the community of Socorro.

“Another exciting part for me is the chance to work with alumni and get to know them and get involved with campus in a strong way,” he added. “For the past 16 years, I haven’t had a real alumni base, but I always valued that as a professor at UNM

and in California. I know some alumni from working with them around the West and I’m really excited to work with them.”

Wells said it is important to recognize the foundation built by Tech’s outgoing president, Daniel H. López. “He’s done a great job,” Wells said of López. “He’s really built the campus in many ways and built something that another president can be proud of and work with. ... He

made it a Hispanic-Serving Institution and that’s something to be proud of.”

Wells grew up in rural southwest Indiana where he lived with parents, Marylou and Bill Wells. During his childhood, he helped with all the farm work, from milking cows to building barns.

“We lived in Lyons, Indiana, and I thought it was the center of the universe,” Wells recalled. “The cool part of that



Dr. Stephen Wells will become the 17th president of New Mexico Tech



was growing up on my grandparents' – and later my uncle's – farm. It afforded me the opportunity to have hard labor and live by a schedule with diligence to take care of things. On the farm, you can't take a day off. That instilled a strong fabric of timeliness of getting things done."

After his parents divorced, Wells moved to Linton, Ind. with his mother and sister. The transition provided a young Stephen Wells with new experiences and confidence.

"I have to hand it to my mother," he said. "Through difficult times, she instilled confidence in me because she had confidence in me. I owe her a lot."

Marylou Wells worked for Indiana Bell in Linton, but before long she was transferred to take charge of the telephone company's Bloomington office.

"I was thrust into a new environment that was invigorating in a university town," Wells remembered. "Then, in ninth grade, my algebra teacher – who also taught drama – got me into drama, which I never would have imagined as a shy farm boy. Throughout high school, that built my confidence and ability." Wells fondly remembers some of his roles in high school drama – the Tin Man in *The Wizard of Oz*, Mortimer in *Arsenic and Old Lace*, and Francis Bacon in *Elizabeth*. But once enrolled at Indiana University, Wells set aside theater endeavors to focus on academics and his growing interest in geology.

"I took a geology class and became enamored with the personal touch of teaching and the Earth," he said. "I took a summer mineralogy [class] with Carl Beck, who developed the mineralogy for Crest

toothpaste, and I fell in love with Earth science. He walked into class in shorts and lectured [about] minerals and I knew I had found the right field."

Wells' first journey to the West was in 1969 when he traveled to Montana with the Indiana University field camp. His professors asked him to continue a field camp project which he finished in 1970.

"The thing that really got my juices flowing to be a professional geologist and an educator was when I was asked to be a T.A. for field camp," Wells said. "I had just graduated and we had students from M.I.T. and elsewhere coming to our field camp. But they trusted me because I had been there."

Wells added, "That's one reason I am excited about coming to Tech – the relationship between faculty and students that drives them to be successful in their careers. The formula hasn't changed since Aristotle. Those are the sorts of people who influenced me."

After working as a summer teaching assistant for the IU field camp, Wells started graduate school at the University of Cincinnati. His first master's project didn't work out, but he soon connected with a professor who became an inspiration – Dr. Larry Lattman. Lattman would later come to New Mexico Tech and serve as its 15th president from 1983 to 1993. "He is a sort of a role



Dr. Laurence Lattman

model and a mentor to me," Wells said of Lattman. "I think the world of him and to follow in his footsteps is a great honor."

Wells also had the opportunity to work on summer expeditions with the Cave Research



Stephen and Beth Wells

Foundation, which brought people from all over the country for cave mapping trips in Mammoth Cave National Park in Kentucky. There, Wells became acquainted with Jack Grover, the physician for the foundation, who one day introduced his daughter Beth to Wells. Before long, the two were dating. Now, more than 40 years later, Stephen and Beth Wells are married with two adult children – a daughter Katie and a son Chris, both of Reno.

Wells completed his master's thesis on the geology of limestone terrain in Kentucky. He then worked on his doctorate dissertation on the arid lands of Arizona. Upon finishing his doctorate at Cincinnati in 1976, Wells accepted a position in the Department of Geology at UNM.

Wells has not only been a researcher and chief executive, but he has also been involved a myriad of community projects, outreach efforts and other leadership

positions. Three of the causes he's championed are the Nevada Center of Excellence in Water, Gathering Genius (or G2), and the Las Vegas Global Economic Alliance. "The Nevada Center of Excellence in Water was a highlight in showing how science and economic development can work together," Wells said. "You'll see that Las Vegas will become a water technology hub over the next decade. I wasn't the inspiration, but I was the shepherd."

Gathering Genius was launched as a nonprofit organization whose goal was to bring the International Science and Engineering Fair to Las Vegas. Beth Wells, an avid educator, took on the role of executive director, while Stephen Wells was the president of the board.

"We were told that we could never get the ISEF in Nevada," Dr. Wells said. "We downplayed that and put together this nonprofit and brought it here in 2009. It was one of the most successful International

Science Fairs ever. We actually made a profit."

Since the successful production of the Science Fair, the nonprofit is now focused on supporting STEM education at the K-12 level across Nevada. "Community service presents the opportunity to spread the name of the Desert Research Institute," Wells said. "I hope to do the same with New Mexico Tech – show that it has value as a STEM university."

Wells also plans to promote Tech's value to the state of New Mexico, while enhancing the university's intellectual capital through its faculty.

"For me, it's just natural to find linkages [between] the mission of the institution and what benefits the institution and the state overall," he explained. "I look five to 10 years down the line and I really think that's where you have to go to build relationships. Every boat lifts with a rising tide. ... and it's fun."

*By Thomas Guengerich*

student research

it *is* rocket science!



new mexico tech student  
rocket scientists record  
successful launch

**Whoooooosssshhh!**

With a sound similar to a roaring jet engine, followed by flumes of smoke exhaust and flames, the last enterprise of the New Mexico Tech Experimental Sounding Rocket Team shot into the atmosphere, leaving the barren southwestern desert in the dust – literally.

To applause, cheers and high-fives all around, students and faculty advisors celebrated their



2016 Rocket Launch Team

most recent launch from Spaceport America in a successful test of a new rocket design on April 9. An onboard video recorded the sounds and sights from the rocket as it streamed off into the sky,

offering a birds-eye view of the Jornada del Muerto Desert basin – a dry and barren 90-mile stretch of earth named “Journey of the Dead” by the Spanish conquistadors.

The launch was part of the Mechanical Engineering Department’s Junior/Senior Design clinic. The clinic is a requirement for all mechanical engineering majors at Tech. This year, students worked to design a vehicle with an aerodynamically efficient outer mold line. The vehicle reached the target altitude with the smallest motor that has been used so far.

Advised by Dr. Nadir Yilmaz, the Tech rocket launch team included leads, Jensen Hoke and David Yoon; seniors, Kevin Childress, Alex Govorov and Alex Bohlin; and juniors, Nico Seamons, Gabriel Montoya, Luis



Rocket setup begins well before dawn

Cuenca, Wes Small and Shuprio Ghosh. When asked to assess the rocket team, Yilmaz paused. That the students are smart and hard-working is a given. These are Techies after all. “They value the collaborative process, and that’s why they are successful,” Yilmaz said. Dr. Warren Ostergren, Vice President for Academic Affairs and a faculty member in the Mechanical Engineering Department, certainly agrees.

“The students have been amazing in terms of the quality of work they perform in designing and fabricating such a high



Assembling the launchpad

performing rocket,” he said. “They completed a highly professional, targeted launch, and the skills they developed through this project will benefit them throughout their careers in industry and research.”

Team leaders Yoon and Hoke said the rocket measures 8 ½ feet long by four inches in diameter. Everything but the motor was designed and built by Tech students, they said. The skins were made of carbon fiber with a 77 percent carbon fiber-to-resin weight ratio, and the bulkheads were student-machined aluminum.

Painted bright yellow with green tips, the rocket bears the name “The Happy Camper,” dubbed after a microbrewery in Santa Fe. “We were planning to paint a Zia symbol,” said Jensen, “but we ran out of time.”

It was a long process from concept to the actual Spaceport test launch. Tech collaborated the planning and execution with White Sands Research and Developers (WSRD),

a Las Cruces-based company managed by Paul T. Jaramillo, Ph.D., and Christina Lohn, Ph.D. Their launch expertise and experience at the Spaceport were extremely beneficial to the student team. To organize the flight, Tech also worked



Preparing Rocket for launch

with Dr. Bill Gutman, Spaceport’s director of aerospace operations, and Christine Anderson, chief executive officer of Spaceport America.

They used a popular vertical launch area at the Spaceport, which, Trekkies and Techies will recall,



Red or green? The quintessential New Mexico question

was where UP Aerospace rocketed the ashes of Star Trek’s “Scotty” (James Doohan) into suborbital space, along with the ashes of Mercury 7 Astronaut Gordon Cooper.

Tech’s rocket was powered by a solid fuel motor composed of an ammonium perchlorate



Poised for takeoff

oxidizer with aluminum fuel, a classic rocket motor binder HTPB (hydroxyl-terminated polybutadiene), and a modern solid rocket propellant APCP (ammonium perchlorate composite propellant). The rocket was launched using a remote-controlled e-match spark. The motor, manufactured by Cesaroni, was purchased from Moto Joe Rocketry.

The rocket, weighing 15 pounds and carrying a 10-pound payload, reached a peak of 11,000 feet with a top speed of 688 mph, accelerating at nine times the pull of gravity. Jensen said the parachute failed to open, so the rocket hit the ground a little hard and sustained some damage.

“Operationally, it was a success,” said Yoon. Next year’s team likely will modify the rocket design and reach for a higher altitude and heavier payload.

Just how did the team transport an eight-and-one-half-foot long rocket? “We put it in the backseat of a truck,” Jensen said. Tech students have been



Some damage was sustained during landing

working on this rocket together since 2013. Yoon, 22, was born in Korea and raised in Los Angeles, Calif. He chose New Mexico Tech because of its low tuition. He graduated in May with a Bachelor of Science in mechanical engineering with an option in aerospace – and he did it in four years! Hoke, 25, is a New Mexico native who graduated from Sandia Prep in Albuquerque. He transferred to Tech from Central New Mexico Community College as a sophomore, drawn here, he said, because of the “strong mechanical engineering

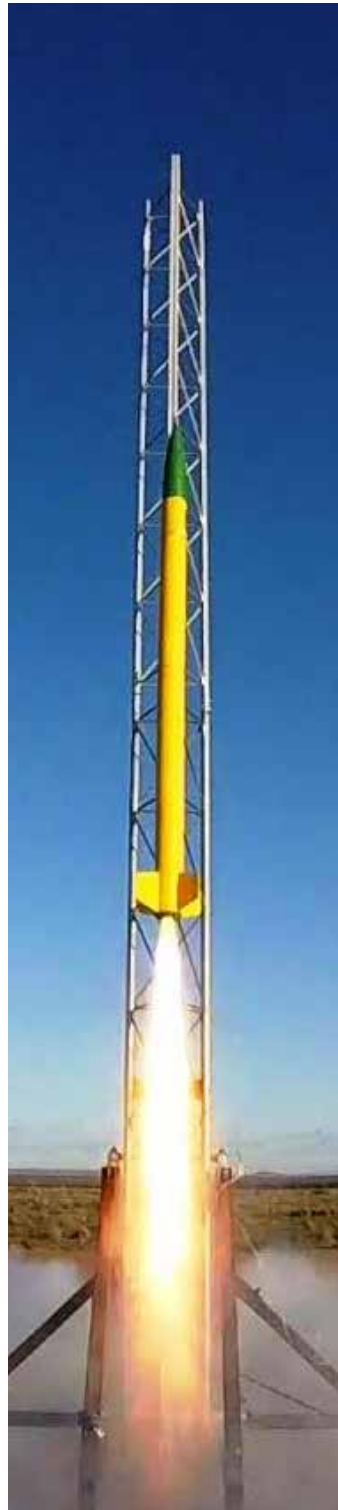
program.” Yoon is looking for a job and Hoke will soon begin graduate school at Colorado State University.

The April launch marked Hoke and Yoon’s second year in Junior/Senior Design clinic. “This is the only place in the world that does both junior and senior design programs. Most schools, they said, only have a senior design program, said Yoon, adding that it was Dr. Ostergren who initiated the two-year program here. According to Mechanical Engineering Department, design clinic students

are provided with ample instruction and experience in working in teams to complete design projects for external clients. Both the course content and the hands-on project work provide students with an understanding for how the mechanical design project works as well as how a design concept is created and the various steps that are then required to complete a detailed design.

What do these students do when they’re not rocketing? While Jensen enjoys other outdoor activities, Yoon said he prefers more rocketing.

“It’s a sickness,” he replies. Dr. Yilmaz joined New Mexico Tech 10 years ago and was recently promoted to full professor in the Mechanical Engineering Department. He has been involved with design-team projects since his arrival, first with the SAE (Society of Automotive Engineers) Mini-Baja Team and now the Rocket Launch Team. Yilmaz started a SAE Collegiate Chapter at Tech immediately after his arrival in Socorro. He has garnered three SAE awards including the recent Triple “E” Award, which recognizes outstanding contributions made by an individual toward activities related to the SAE Education Board. In addition to his work with the rocket team, Yilmaz is advising the SAE aero-design project. His work, and that of the next team of student engineers, will continue in the fall. Their ultimate goal is to get other universities involved in the process, he said. New Mexico Tech could lead the charge for a statewide competition.



Liftoff!

designing their first rocket in August 2012. In July 2013, they surprised the competition by taking first place in the Advanced Category of the Intercollegiate Rocket Engineering Competition in Utah. Hosted by the Experimental Sounding Rocket Association (ESRA), the annual competition features teams from universities around the world.

Every year, Tech make strides in rocket design and manufacturing, making increasingly loftier goals. For the past two years WSRD, which has launch experience in both government and private circles, has worked with Tech students, advising them not as amateurs, but as professionals-in-training. The collaborative effort between NMT and WSRDs has been so well received that there have been recent discussions about how the process might be formalized into a course. An interdependent class could be offered as early as the Fall 2016 semester and culminate in a large launch event in late spring. ■



**NEW MEXICO TECH**  
*Best College Value in Public Colleges: Kiplinger’s, 2016*

*Ranked #1 Best Bachelors Programs for Engineering; Best Value: USA Today, 2016*

*Ranked #2 in the West for Average Wages of Graduates: Payscale.com, 2016*

Tech students began



# \$5 challenge to alumni

john dowdle '60

donor's story: john's challenge to alumni john dowdle class '60 bs mathematics member of the 1889 society.

By Heidi Brown

In March, while enjoying lunch with John and his lovely wife Ann in Austin, Texas, we discussed what was new on campus. I explained the ground breaking ceremony for the new chemistry building was happening and the building is under construction.

The conversation continued with me explaining how we are going to sell the naming rights to the 19 labs, 10 large labs and 9 smaller labs to raise the remaining \$300,000 to finish the building. John, always the mathematician, asked how many alumni we had in our database. I replied "almost 10,000." He said, "So if every alumnus gave you \$5, one of the larger labs could be the Alumni Lab." I said, "Yes!"

At that point, John reached in his wallet and handed me \$5, then Ann

reached in her wallet and handed me another \$5.

With the first \$10 raised, John has a challenge for the alumni: Send in \$5 or more to the Advancement and Alumni Relations Office in support of the Alumni Lab in the new chemistry building. He believes we can get enough to name two Alumni Labs.

As you all know, the chemistry building will touch the lives of all NMT students as every Tech student is required to take two semesters of chemistry regardless of their major.



John Dowdle and Heidi Brown challenge you to give!

We extend John's challenge to all alumni to contribute \$5 or more to name one or two labs in the new chemistry building as an Alumni Lab. For more information please contact Heidi Brown at [heidi.brown@nmt.edu](mailto:heidi.brown@nmt.edu), 575-837-5292.



Do you remember me?

## Calling the classes of 1966 and 1991 25th & 50th

### Reunion Celebration • October 2016

First, we need everybody's address... Our goal is to notify 100% of the class members.

Please email address updates to [kiane.pound@nmt.edu](mailto:kiane.pound@nmt.edu), or call 575-835-5618

*Help us get the word out! Can you help us notify these people?*

#### Class of 1966

William Hall  
Richard Hartman  
Benjamin Jarboe  
Vivian Kan  
Peter Kun  
Jorge Maravi  
Ralph Nickerson  
Royce Olsen  
Srinivas Reddy  
Angel Rejas Chavez  
Terrance Rockwell

Earl Shortridge  
Surendra Singh  
Susan Stryjewski  
Harold Wainwright  
Virgil Lynn Wesley



#### Class of 1991

Keith Bisset  
Jessica Busselle  
Theresa Calovini  
Eka Clarawati  
Richard Creed  
Conrad Fjetland  
Jing-Ping Ge  
David Grabka  
Myrna Hamilton  
Mohammad Hammad  
Jimmy Johnson

Frank Key  
Abdulla Mohd. Putra  
Terry Myers  
Serdar Ozalaybey  
Benjamin Shaver  
Lauri Sybeldon  
George Washington  
Robert Wells  
Robert White  
Lawrence Williams  
Eftyhia Zesta

# construction update

chemistry building and more

By the start of fall 2017, the New Mexico Tech Chemistry Department will have new digs. Construction is already well underway for the department's new 40,000 square-foot building. In May, the Board of Regents voted to name the new chemistry building after retiring President Dr. Daniel H. López. The official building name will be determined at future Regent's meetings.

*bradbury stamm*

Construction work began in March, with an official

ground-breaking ceremony in April. The old Bureau of Geology building was razed to make way for the new two-story chemistry building which will sit just south of Workman Center. The Fidel Center parking lot was closed June 1 for repaving and reconfiguration. That portion of the project will be completed by July 31, 2016. The campus community will see a lot of progress over the summer as the steel structure is completed, with framing, roofing and metal decking installed.



Site map

At the time of Gold Pan publication, the building's frame had been erected and the basement was dug and poured. About half of the building's ground floor had been poured as well.

Interior work will continue throughout the fall 2016 semester, with the building expected to be completely enclosed by late October or early November. In the traditional fashion of New Mexico Tech architecture, the building will have a stucco façade with a red tile roof. The interior is expected to be finished by February 2017 and the department plans to start moving in during March. The official grand-opening is projected for August or September of 2017.

The first floor of the building will include eight labs, a stock room, graduate student offices, one large classroom and a vast common area for studying and lounging. The second floor will



Construction site of the new Chemistry building

include 14 more labs, 14 faculty offices, a conference room, a computer lab, a smaller common area and a faculty lounge. The building is being paid for by a \$15 million General Obligation Bond approved by New Mexico voters during the 2014 general election.



Groundbreaking ceremony

### data center

The next project on campus will be a new data center, which will give Tech a centrally located building for information technology, particularly servers. A kick-off meeting with the architect was held in May, but the location of the new facility has not yet been determined. It may be built near Facilities Management in west campus or closer to the Energetic Materials Research and Testing Center (EMRTC). The

data center project is funded by \$2 million of severance tax funds.

Tech's current data center is out of capacity. All the servers on campus will be able to be consolidated at the new center, helping with maintenance costs, cooling costs and other utilities. Ground-breaking will take place in early 2017, with a completion date projected for late 2017 or early 2018.

### jones hall

The next item on Tech's priority list is the refurbishing Jones Hall. This \$5.5 million project will be on the ballot of the November 2016 general election as "Bond C."

### magdalena ridge observatory interferometer

New Mexico Tech will also be asking the state for \$8.5 million to



purchase more telescopes and infrastructure at the Interferometer. The facility atop the Magdalena Ridge installed the first telescope (without mirrors) in May 2016. Tech also has a contract for \$25 million with the Air Force Research Laboratory to install telescopes. Ultimately, the facility will feature 10 telescopes and will be capable of producing images 100 to 200 times the resolution of the Hubble Space Craft – at a fraction of the cost.



Interferometer atop Magdalena Ridge

### wellness center

Tech expects to be on the 2018 general election ballot requesting funds for a new Wellness Center. This building would be about 60,000 square-feet and include all the

amenities of the existing gym, as well as an indoor pool and other offices and recreational areas. This proposed project would cost about \$15 million, with half of the funding coming from a General Obligation Bond and half from the university.

### chiller plant

Next on Tech's construction list is a new chiller plant for the south side of campus. Tech plans to request funds during the 2020 general election.

### brown hall

The university's final capital project priority is a complete renovation of Brown Hall. This project is expected to cost around \$6 million.

# student spotlight

k. ryder fox

An erstwhile videographer and storm chaser,



K. Ryder fox

K. Ryder Fox falls into the “non-traditional” category of students. Currently working toward a bachelor’s in atmospheric physics, the 36-year-old has considerably more time and experiences behind him than the majority of his undergraduate peers at New Mexico Tech. He also stands out as an activist for inclusion, having devoted much of his past two years at Tech to increasing our community’s awareness about individuals like himself who identify as non-binary, or transgender.

## difficult beginnings

Kris Ryder Fox was born on December 31, 1979, in Springfield, Mo. The

eldest of five children, Fox was raised in an extreme Christian fundamentalist

burner,” Fox explained. “I lost pieces of my personal evolution. I had

independence and boost his confidence.

---

**IN “THEIR” OWN WORDS** *To help address the growing use of gender-neutral pronouns, we asked K. Ryder Fox to give voice to this issue by sharing his/their personal experience and considerations. What follows is a thoughtful and insightful response we are grateful to publish: “They/Them, or other gender-neutral pronouns are used by people for a number of reasons. Some identify as agender or bigender; others have more fluid gender identities. Some do not experience a strong attachment to binary gender identity. Sometimes this decision is fairly complicated, which is where I am right now. It’s harder for me to be concise because I am not of one mind on my own pronouns currently. ... From the time I was tiny, I felt my body as male, identified as male, and didn’t understand while people did not see me as male, or tried to push me into female behaviors and expectations. ...”*

---

home where day-to-day life was strict and oppressive. Associating with anyone outside of the family’s Baptist church was off limits. So was inquiry.

“We weren’t allowed to talk at all when I was a child,” Fox said. “We didn’t have basic education because all education was considered evil.”

Fox was kicked out at the age of 17. He spent much of his late teen-age years and early 20s homeless, living in vehicles for shelter and trying to eke out a living. At that time, there was little opportunity for Fox to examine their own gender identity; they were too busy just trying to survive. “I put myself on the back

to wait until later to have conversations with myself about me.”

## evolution

Fox found their first sustainable job as an intern videographer in Arkansas. Pay was low, but overtime opportunities made up the difference. “They need you constantly,” he said of television news departments. Fox tracked storms in several states and saw his share of tornadoes, hurricanes and blizzards while working for both small and large markets, including an ABC news affiliate in Minnesota. By the end of their television career, Fox was conducting interviews and choosing his own stories. The work helped Fox shape their

Most of Fox’s independent life was also committed to hard physical training and nine years ago they decided to tackle a difficult economy by working as a certified personal trainer. “It launched itself into a full career,” said Fox who continues to work with a handful of loyal and grateful clients part-time on Skype. Opportunities at Tech for real-life undergraduate research fit that ideal. This summer, Fox is working at the National Center for Atmospheric Research (NCAR) in Boulder, Colo., interning with the UCAR SOARS (University Corporation for Atmospheric Research; Significant Opportunities in Atmospheric Research and Science).

Like so many Techies, Fox's so-called "free time" is in short supply most days. In addition to personal training and studying, Fox typically spends 10 hours a week each semester as an OSL learning coach; another 10 hours are spent working at Langmuir Lab. Fox said a later start in school and a limited upbringing make it that more difficult for them to meet Tech's academic demands.

"I took my first science class at 33," Fox said, adding that it often takes them much more time and work to achieve what appears to come naturally to peers in the classroom and lab. But to say Fox is determined is an understatement. Fox maintains a 3.8 GPA, acquired he said, "Through blood, sweat and tears." Fox transferred to New Mexico Tech in the fall of 2014 specifically seeking

to quantify his interest in storm formation and learn about the physics that define the phenomena.

"I want to learn the factors that lead to hurricane development and how to determine where they will form," Fox said. "I wanted an education beyond books, more of a hands-on experience."

"The program works to bring in students whose voices are least represented in the atmospheric sciences with the goal of growing them into their careers successfully and making a more diverse and inclusive environment in atmospheric sciences," Fox said. Specifically, Fox is examining Hurricane Patricia; the October 2015 storm is the strongest recorded hurricane in the Western Hemisphere to date. Fox explained their research involves "working

---

*For years, being without a binary identity gave me space to be simply me. That coupled with having experienced such gross injustice against women keep me more in a space of "non-erasure". I don't want to erase my history. I feel like I am a much more empathetic, vulnerable, real, and balanced person for not having a binary experience.*

---

with a brand new model that reverse engineers the hurricane while studying observational data to learn whether we can better predict the rapidity with which such strong hurricanes develop."

Fox has much praise for his advisor, Dr. Sharon Session, for her academic advice and guidance. Dr. Sessions has also been very supportive of Fox's co-curricular efforts. Among other recognition, Fox received an NMT Student Appreciation Award in 2015.

Just as some people don't feel comfortable within standard boxes, others don't feel comfortable within standard bathrooms. Among other inclusion endeavors at Tech, Fox led the recent movement to reclassify single-occupancy bathrooms across campus as gender-neutral. They worked with Dean of Students Melissa Jaramillo-Fleming, QuASAR (Queer

Association of Socorro Area Residents) and other campus groups for several months to realize the sought change.

To date, 12 of the 20 single-occupancy bathrooms on campus have been designated gender-neutral. With support from Tech administration last spring, Fox also initiated an educational campus training session, "Transgender 101." Attendance exceeded expectations and proved to be quite positive in educating the Tech community about the complexity of gender issues. Enhancing Campus Diversity Awareness Fox's advocacy for the LGBTQIA (Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual) communities led to their organizing Tech's first-ever Diversity Week in the fall of 2015. The student-led initiative aimed for every minority group on campus to be represented. Students,

---

*My upbringing was so horribly oppressive and despising of women that I suffered severe physical, emotional, verbal, religious, and social abuse. Not only was I constantly pushed into being female, but then degraded because I was female. Those experiences left me voiceless, suicidal, powerless, without humanity. ... As I recovered through a lot of shame and self-hatred, loving myself included loving all of the spectrum of gender that I encompass.*

---

# student spotlight

k. ryder fox



Diversity Panel:  
Melba Aguilar

Dr. Nancy López

Judy Loveless

Jane Cook

Yitian (Tina) Li

Pat Miller

faculty and staff were invited to attend daily workshops, open dialogues, and increase their knowledge on issues ranging from supporting veterans on campus to

professions, and reach out to incoming students who did not realize that Tech had support for



Moderator  
Samuel Brinton

unprecedented national attention, politics frequently overshadow the human side of the very real, day-to-day issues affecting

“We have had numerous transgender breakthroughs on campus including gender inclusive housing beginning in the fall of 2016, gender-neutral changing areas and bathrooms, and policies set by the OSL (Office of Student Learning) that require tutors to use gender-neutral language,” Fox said. “Several professors are [now] asking students for their correct names and pronouns. Student travel policies have also changed to be more inclusive of people’s gender identities.”

---

*When people speak very assertively to their binary gender, it is never something that resonates with me. I always find myself wanting to educate people not to assume binary and appreciate how gender neutral pronouns help educate and open dialogue. ... All of these are reasons that I have persisted with they/them. That said, it was harder to decide to pursue medical transition. Yet, transition has brought me so much into what physically is me and given me more validation than I expected when people see me as male. That leaves me in this funny quandary of asking what is my preference? I do not believe I will ever meet particular stereotypes.*

---

gender nonconforming people. Fox helps to make these issues much more personal for those on campus fortunate to know them. While Fox’s student advocacy began with addressing campus bathrooms, so much more has been accomplished at Tech because of his commitment to progress and equity.

living and learning with disabilities.

“Through the incredible support of the Office of Advancement and Alumni Relations,” Fox said, “we were able to host over 770 people throughout the week, bring in a panel of six people representing various minority groups and STEM

students like themselves.” Tech’s Diversity Week was also supported by many students and professional staff from the offices of Student Affairs, Student Learning, Counseling & Disabilities, and Residential Life, among other departments. While transgender rights continue to gain

---

*When the NSF requires that I report for their diversity studies, it always upsets me to only be given the option of “male” or “female” – what is accurate, when my documentation is Caucasian male and I still represent diversity? So currently, I am in this space of being happy when others refer to me with male pronouns in general life (It feels like I’m just a person; I see/hear coming back to me what I am expressing and what is deeply true to me). Yet, when I am asked my pronouns, or engaged in conversation I have too much to say about a gender spectrum and haven’t felt true to “he/him” as a succinct answer.*

---

Fox is currently advocating for the opening of a Diversity Center on campus. He believes supporting Tech's diverse community will help build a more vital campus. "All students deserve to have their voices heard and should have equal access to quality higher education," they said.

There is some irony in *Gold Pan* pointing out Fox's "non-traditional" status here that we must address up front. To begin with, educational institutions – especially public universities like Tech – have a responsibility to equally support and embrace each and every one of the students they admit. Yet categorizing students by differences in age, race, gender, financial need, and even ability is a common practice in higher education. Categorizations persist not only for necessary reporting and funding purposes, but also because educators often seek to address needs specific to certain student populations in order to better support and engage them.

But categories also have the potential of relegating people to boxes into which

they do not necessarily fit neatly, or comfortably. Fox is one of many people who cannot check a box with ease when presented with only two options: male or female. Fox does not precisely fit either binary.

This is why "he" and others also make use of the gender-neutral pronouns "they" and "them" to describe Fox. People may interchange "he, him, and his" with "they, them, and their" when referring to Fox.

In general, Fox said he is comfortable with that. Accepting the use of "they" and "them" to describe a single individual can be a difficult, maybe near-impossible adjustment for people who are grammar purists, or well accustomed to gender norms – particularly for those of us who never once questioned our own gender identity. But making use of others' preferred pronouns is simply a matter of respect in a matter that is, frankly, not so simple. After all, as Fox explains, they want to love "the full spectrum of gender I encompass."

## alumni reception list

Please join the office of Advancement and Alumni Relations for networking receptions in a city near you or at an upcoming conference.

Check our webpage <http://www.nmt.edu/advancement> or follow us on Facebook: New-Mexico-Tech-Alumni-Interaction for all announcements on dates, locations and times. To keep your address and email up to date, please email [Alumni@admin.nmt.edu](mailto:Alumni@admin.nmt.edu).

## convention receptions

**June 20:**  
AAPG Annual Convention & Exhibition 2016 – Calgary, Alberta

**September 26-28:**  
MinExpo International 2016 – Las Vegas, Nev.

**September 26-28:**  
SPE Annual Technical Conference and Exhibition 2016 – Dubai, UAE

**December 12-16:**  
AGU Fall Meeting 2016 – San Francisco, Calif.

## special events

**September 22-23:**  
President's Golf Tournament 2016 – New

Mexico Tech Golf Course  
**October 13-16:**  
49ers Celebration 2016 – New Mexico Tech Campus

## summer receptions:

**Northern California:**  
San Jose and Sacramento

**Southern California:**  
San Diego, Huntington Beach, Ridgecrest, Pomona

**Colorado:**  
Southwest Area event – Palisade Colo. near Grand Junction

**Idaho:**  
Boise and Idaho Falls

**Montana:** Bozeman

**Nevada:**  
Reno and Elko

**New Mexico:**  
Santa Fe at Charlie and Diane Goodman's house

## fall receptions

**Arizona:**  
Tucson and Phoenix

**Maryland:**  
Baltimore, Bethesda and Washington DC

**New Mexico:**  
49ers, Silver City, Roswell, Albuquerque, Artesia, and Carlsbad

**Oklahoma:**  
Oklahoma City and Tulsa

**Texas:**  
Houston, Midland, and Lubbock

# student affairs office

by michael voegerl

## student affairs

Student Affairs is a very vague sounding name, not sure what they really do. It's not like the Payroll Office or Admissions Office; you can easily tell what they do. Student Affairs office, not so much. So, let's see if I can explain what the Student Affairs office does; after all, I am the director of Student Affairs.

*Question:* Where do I go if I want to do a semester abroad?

*Answer:* Student Affairs

*Question:* I need business cards for a conference I am attending, who can help with that?

*Answer:* Student Affairs

*Question:* I would like to get an internship in hydrology, who can help me with company research?

*Answer:* Student Affairs

*Question:* I heard that Intel was hosting resume review sessions, who sets that up?

*Answer:* Student Affairs

*Question:* Is it true that

international students must file state tax returns?

*Answer:* Yes, Student Affairs helps with that.

*Question:* I have a job interview this week and I am really nervous, does anyone do mock interviews?

*Answer:* Student Affairs

*Question:* My visa is expiring, who can help me get it renewed?

*Answer:* Student Affairs

*Question:* I am an international freshman transfer student, who does the admission paperwork?

*Answer:* Student Affairs

*Question:* I have a Co-op with Jacobs Technology, who manages the process?

*Answer:* Student Affairs

The detective in you is thinking, "There seems to be a trend here." Student Affairs office is the place students go when they need answers. Our goal is to be able to answer every question or at least know where to find the answer. Think of the Student Affairs staff as customer service representatives



Indian students at the International Student Day

who are really good at their jobs. Is it too much to ask that every student on campus know who we are and how we can help them? The first interaction a student has with Student Affairs starts with campus visits and continues on through graduation to helping alumni reconnect with Tech. We are like the insurance company, "you are in good hands." The Student Affairs office is here to support the Tech community in every way you can imagine.

Last year, Student Affairs had over 4,000 office visits by students. We also had over 1,000 students, faculty, vendors and staff attends the two career fairs along with another 250 attendees of various workshops hosted by Student Affairs. Student Affairs is in the "People" business and

business is good.

If you find yourself having questions that you just cannot seem to get answers for, such as, "I want to give back to Tech, but I am not sure how I can help," give us a call at (575)835-5060 or send an email to michael.voegerl@nmt.edu. It is not always about donating money; sometimes it is mentoring a student or just letting us know that your company is hiring, but the money does help. When you find yourself on campus, stop by the Fidel Center room 262 and say, "Hi."

"Thank you," for your continued support of our Techie way of life.

*Michael Voegerl*  
Director of Student Affairs.



# alumni association news

a letter from your alumni association



Brett Wendt

*Dear Readers:*

*Congratulations to the newest alumni of New Mexico Tech – both undergraduate and graduate – who received degrees on May 14. While the chapter of student life is closing for many of you a new chapter is opening. The transition into a professional career is a time of great uncertainty and constant change with rewards bounded only by your*

*ability to recognize and create opportunities. The New Mexico Tech Alumni Association (NMTAA) wishes you all the best on your new venture and wants to hear all about it! Please keep in touch.*

*Honors went to this year's recipient of the Distinguished Alumni Achievement Award, Dr. Nikhilesh Chawla (B.S., materials engineering, 1993, New Mexico Tech). Nikhilesh has distinguished himself as a professor, researcher, and prolific author at Arizona State University. His impact on the field of materials is both large in scope as well as content.*

*Honors also went to this year's recipient of the Distinguished Service Award, Dr. Daniel López. While he will be most recognized as President of NMIMT for the past 23 years and the achievements that come with it, he has also been a partner in establishing the relationship between NMIMT and the NMTAA. The present day Alumni Association has been shaped through the influence of Dr. López and we thank him for the generous service this provided us.*

*As announced last year, the Alumni Association is a full-fledged nonprofit organization and we set a goal to raise \$350,000 to begin formal operations based in Socorro. Over the past year, we have raised almost 20 percent*

*of this goal and the effort is continuing. Thank you to all who have contributed. We are planning to "go live" with our website before 49er's to make it easier for you to communicate with us directly. The launch will be announced on our social media pages so please stay tuned.*

*If you have questions about our plans, would like to become a dues paying member, wish to make a contribution, or simply want to know more about the Association, you can find us on Facebook or LinkedIn by searching for "New Mexico Tech Alumni Association." Alternatively, you can contact us using old technology and write to P.O. Box 2944, Socorro, NM 87801.*

*I will close on the comment that we welcome Dr. Wells as the new President of NMIMT. We look forward to hearing his vision on the future of Tech and his philosophy on how alumni should be included in that vision. The NMTAA is eager to continue building a more meaningful, long lasting, and collaborative relationship between the institute and its alumni.*

*Sincerely,*

A handwritten signature in black ink, appearing to read "Brett Wendt".

*Brett Wendt  
President, New Mexico Tech Alumni Association  
(B.S., Petroleum Engineering, 1992, New Mexico Institute of Mining and Technology)*

# alumni spotlight

state representative don tripp

don tripp: entrepreneur;  
legislative leader, 'pretty nice  
guy'

Don Tripp is a man of many hats. The most common he wears is likely the cowboy hat he dons while riding his horse in parades or bidding at junior livestock sales during county fair time.



State Representative  
Don Tripp

As the state representative for the 49th House District – which includes Catron County, most of Socorro, and some of Valencia County – Tripp attends a lot of parades.

He takes his public engagements in stride,

just as he handles his role leading the New Mexico House of Representatives. Tripp (R-Socorro) was first voted speaker by his GOP colleagues in January, 2015 when Republicans gained control of the house for the first time since 1954. He is the only person from Socorro County to ever serve in the position.

A 1969 alumnus of Tech, Tripp's alma mater honored him with the Distinguished Alumni Award in 2004. He has the rare distinction of being one of only three individuals to receive a baccalaureate degree in history from New Mexico Tech; while history classes were still offered here, the major has long been defunct.

Tripp followed his then-girlfriend, now-wife Rosalind Givens to New Mexico Tech in the summer of 1964, just after they graduated from Socorro High School. He was a scholarship student.

"I started out on the science track, but by my fifth year, I needed to get out," he



Speaker of the House  
Don Tripp

said. Tripp had expanded a business he started in high school and was working part time. Meanwhile, he had taken every history class offered by Dr. Paige Christiansen. Tripp was also taught by the somewhat irascible Dr. John McKee and the more-mellow Dr. Howard Sylvester, department chair.

It was Christiansen who wanted to expand Tech's History curriculum – yes, there was a dedicated Department of History back then – and told Tripp he was eligible for a 3-credit-hour directed study. Tripp accepted, earning his diploma in May 1969.

He may have completed his collegiate studies just in time because the freshly minted grad was already supervising 12 people who made wax-injected jewelry casts for their young boss. Six of his employees were also Tech students. "I paid them by the piece so they could earn some extra money," Tripp said.

## pasadena to socorro

Donald Lora Tripp Jr. was born on February 23, 1946, in Pasadena, Calif., to the late Don Sr. and Elinor Tripp, six years after the arrival of his sister, Karen.

The young family moved to El Paso, Texas, where Tripp Sr. taught himself how to repair watches during the off-season winter months to supplement his work as a concessionaire. When his parents lost the concession contract, they relocated to Ruidoso, N.M., opening a small jewelry store and a Mexican restaurant. Don worked as a "pearl diver" – slang for dishwasher. The younger Tripp followed his father's example of entrepreneurship. "My dad a very capable person – he



Don and Rosie (Givens) Tripp

could build anything,” Tripp remembered.

Don Jr. may not have found any rare gems in dirty dishwater, but he did discover a talent for jewelry making. Before his teenage years, he learned the art of ring-sizing. By his high school freshman year, he was working with gold and silver metals. In addition to working for his parents, he sold his own designs to other stores in Ruidoso.

In 1963, the Tripps settled in Socorro and opened a jewelry store in La Villa

Shopping Center where John Brooks sits today. While his parents and sister worked in the main part of the store, Tripp maintained his own space in the back where he continuously honed his jewelry-making skills. In 1964, the business expanded to offer Fender and Gibson guitars and accessories.

The first major client during the La Villa days was the late osteopath, Dr. John Aiken, who ordered three silver crosses. “He then came back and ordered 50 more,” Tripp

said. Mom Elinor came to the rescue by giving her only son her treasured sterling silverware which he melted to complete the order.

“My mom was my first venture capitalist,” said Tripp with a smile.

When the Rasco variety store expanded its space in 1972, the owner of La Villa Shopping Center evicted Tripp Jewelers. The business relocated across the street to M Mountain Mall. Six years later, Tripp’s father was able to purchase property a few blocks north and built Adobe Plaza where they relocated. Meanwhile, Tripp Jr. moved his small jewelry manufacturing business to a small shop behind his parents’ home on Miller Place until he built the Tripp Inc. manufacturing plant off of North Frontage Road in 1975. He expanded his holdings in 1979 when he bought the former AT&T facility. A year later, he built his first storage units.

The entrepreneur had arrived. In the boom years,

Tripp employed 54 people and the “big item” was gold. Oh, and La Villa Shopping Center, which unceremoniously dumped the Tripps in 1972? Don bought it in 1978.

Tripp alone survives the core family: Tripp Sr. died in 1987; Tripp’s sister died in 2013 and his mother passed in 2015 at the age of 103.

*from guitars to gavels*  
Present day Don Tripp is preparing for an Amigos Trip, one of those sell-New



Don and Rosie Tripp

Mexico goodwill treks. He agreed to meet in his

## alumni spotlight

### state representative don tripp

office before hitting the highway. His quarters are decorated in basic office standards except for a wall featuring a collection of highly polished guitars, mandolins and other stringed instruments. “I play, but not very well,” he said somewhat sheepishly.

Talk has turned to politics, with Tripp insisting that his wife, “Rosie is the real politician in the family.”

Rosie Tripp has served on the Socorro City Council as well as the Socorro County Commission, and is a longtime Republican National Committeewoman for the state. She also held the post of Socorro County Republican Chair, but stepped down when her husband was elected to public office. “That’s when I became county chairman,” Tripp said.

“One of the jobs of county chairman is to get candidates on the ballot,” he continued. “We had no volunteers in the race for state representative in 1998, so I put myself in.”



Don at the MRO groundbreaking

Tripp had no real interest in challenging the Democratic incumbent who, Tripp said, was planning to run for the state Senate, but evidently he reconsidered. In his first bid for elective office, Tripp barnstormed to victory, a streak that continued through the next eight election cycles. He ran unopposed three times.

Tripp has represented District 49 since 1999, building the experience and leadership necessary for his most recent role of speaker, the most powerful position in the New Mexico House of Representatives.

“I find my job to be the

facilitator, the liaison between both sides, the Democrats and the Republicans,” he said. The speaker’s job is to be fair, to follow the rules, and to stand by your word. I find it makes it easier if you do what you say and don’t surprise anyone.”

As speaker, Tripp has worked to improve the House’s efficiency. The first major change he made was to insist that committee meetings started on time and as scheduled. It took some folks in Santa Fe longer than others to understand that Tripp meant to enforce the edict he handed down. “Lobbyists were inconvenienced,” he said. “But they eventually learned to get there on time.”

“The public has been treated very poorly in the past,” continued Tripp. “We need to respect the public and their time. Many people travel long distances to have their issues heard, and we owe them the courtesy to meet on schedule.”

Most of the changes under Tripp’s gavel are procedural in nature, such as reconstituting the Labor Committee and the Business and Industry Committee into a single unit – the Business and Employment Committee. He also guided the creation of a new stand-alone Health Committee which used to be the Government, Health and Indian Affairs Committee.

Tripp’s relatively calm demeanor is an asset. “When things blow up on the floor, it’s my job to herd everyone back to the



Stewart Youngblood and Olivia Chavez with House Speaker Tripp at Graduate Education Day

middle,” he said. “With fighting all the time, not much gets accomplished.”

### meanwhile, back at the ranch

Techies often express dismay at the ragged, rundown look of Socorro’s main street with its abandoned buildings and weed-infested lots. In Tripp’s view, the landscape is not totally bleak. He cited the expansion of Socorro General Hospital, the city arena and soccer fields, as well as plans to bring a dialysis unit to town. It could be worse, he said: “We’re not Detroit.”

The recent recession forced Tripp Inc., to downsize its operations. There are around 30 employees at present. Tripp’s guidance to anyone wanting to open a business is this: “Best advice is not to expect to make much per hour. You actually need to plan to take as little as possible out of the business for many years – that’s the only way to build capital. One pitfall is not being able to work more than you ever thought possible.”

Tripp believes the City of Socorro, much like the state and nation, is going through a transition, particularly in economics, healthcare and education. Environmental regulations have hamstrung the ranching and timber industries, and young people are running for the borders for better jobs, he said. “There’s been a real brain-drain on the state.”

But help is on the way, he added. Tripp is proud of the Jobs Council he co-chairs with President pro tempore Mary Kay Papan of Las Cruces. Comprised of legislators, laymen, members of chambers of commerce and organized labor, the Council recently hired an economist to bring more jobs to the state. “Issues voted on unanimously by the Council make it possible to move initiatives through the Legislature without fights or opposition,” he said.

“It’s harder and harder to get employees because we need to do a better job of educating them,” he said. Tripp cited a pilot program

starting this year whereby 20 middle schools in the state will take part in a hands-on workshop to learn the fundamentals of physics, develop critical-thinking skills, and help ease the stigma of physics being “too hard.”

“We haven’t educated our kids,” he said. “We need more locally grown engineers and STEM graduates – many of those jobs are drawing mostly international applicants.” Tripp added that New Mexico Tech has done a great job of educating men and women in their chosen fields and he believes the university will remain the economic engine of the community.

Proud ambassadors of both New Mexico Tech and the State of New Mexico, Tripp and his wife have visited every continent on the globe, including Antarctica. Their travels have included a week on a boat in the Galapagos Islands and visiting the Amazon with their daughter and grandchildren. They have two children, Don Tripp III and Kimberly

Tripp Gonzales, six grandchildren and three great-grandchildren.

Regardless of where they go, the couple is always glad to return home to Socorro. While Rosie might be the politician in the family, Don has turned into quite the campaigner, earning praise from constituents as “a pretty nice guy” who also gets things done. And he never stops campaigning. If there’s an event in his legislative district, Rep. Tripp is likely to be there. Or maybe it’s Don. It’s the same hat, after all, and he wears it well.



State Representative Don Tripp at the 49ers parade in Socorro, NM

# Graduation



*The Class of 2016 was the biggest ever at New Mexico Tech. A total of 315 people participated in commencement, with 410 individuals earning degrees since the Commencement 2015 ceremony.*



A few data points about the Class of 2016:

The average GPA of the bachelor's recipients is 3.26.

69 percent have GPAs of 3.0 or greater.



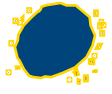
Exactly one-third (33.33 percent) have received at least one F in a course at NMT.

Four people graduated with a perfect 4.0 GPA – and one 4.0 student received two bachelor's degrees.

The youngest bachelor's recipients was 19 years old, and there are three of them.

74 percent of the undergraduates hail from New Mexico.



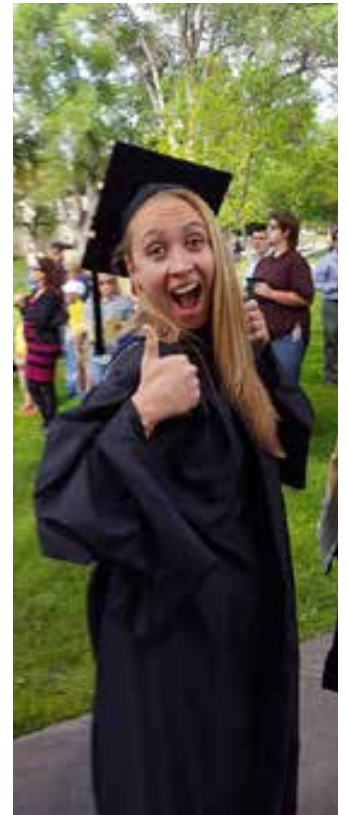


# 2016



Mechanical Engineering Department awarded the most bachelor's degrees with 78 being awarded.

Masters of Science for Teachers Program awarded the most master's degrees with 22 degrees.



Physics Department awarded the most Ph.D. degrees

In the history of New Mexico Tech the total number of degrees awarded are:  
8,359 Bachelor's degrees in  
3,163 Master's degrees  
448 Ph.D.s



# awards

dr. mark person  
dr. kevin kirk

dr. nikhilesh chawla  
dr. daniel h. lópez

## distinguished research award

Dr. Van Romeo, Vice President of Research and Economic Development presented the Distinguished Research Award, to Dr. Mark Person from the Department of Earth and Environmental Science. His nomination was supported by six distinguished North American scientists representing two generations and several scientific disciplines drawn from government and academia.

Dr. Person completed his Master's degree at New Mexico Tech in the 1985, returned for a Sabbatical Leave from the University of Minnesota in the late 1990s, and joined our faculty in 2009. He is the director of our internationally recognized Hydrology Program. His research focus on the intersection of hydrology and geology, examining the effect of geological processes on hydrology, and vice versa. Dr. Person has made significant strides studying new carbon sequestration technology to help moderate climate

change by storing CO<sub>2</sub> underground.

## distinguished teaching award

Dr. Warren Ostergren, Vice President for Academic Affairs presented the Distinguished Teaching Award to Dr. Kevin Kirk, associate professor in Biology. Dr. Kirk earned his bachelor's in botany from Oregon State University in 1980, his master's in zoology from Washington State University in 1983 and his Ph.D. in biological sciences from Dartmouth College in 1988. After completing post-docs at the University of Michigan and the University of Kentucky, he joined our faculty in 1992. Dr. Kirk teaches courses in ecology, environmental toxicology, evolutionary biology, biology of aging, oceanography, and advanced population and community ecology.

Dr. Kirk is an excellent educator, tirelessly helping students achieve their potential. One student said it best: "Dr. Kirk is an extremely engaging lecturer who is able to communicate ideas, whether simple

or complex, in an understandable and memorable way. He truly cares about teaching his students the classes' particular subject matter as well as skills that are broadly useful in science and technical work."

## alumni association awards distinguished achievement award

The New Mexico Tech Alumni Association has selected Dr. Nikhilesh Chawla to receive the Distinguished Achievement Award.

Nik graduated from New Mexico Tech in 1993 with a bachelor's in Materials Engineering. During his time at Tech, he won the Cramer Award for best graduating engineering student, the Paige Ashman Memorial Prize in Materials, and the Macey Scholarship. Spring-boarding from that foundation, he earned his Master's at the University of Tennessee in 1994, and his Ph.D. in Materials Science and Engineering from the University of Michigan in 1997. He is currently the Fulton Professor of Materials

Science and Engineering at Arizona State University. He is also a Professor of Mechanical Engineering.

Prior to joining ASU in 2000 he was a postdoctoral fellow jointly at Ford Motor Company and the University of Michigan, and a senior development engineer at Hoeganaes Corporation.

Professor Chawla's research interests encompass the mechanical behavior and modeling of advanced materials at bulk and small length scales, including Four Dimensional materials science, lead-free solder alloys, composite materials, and nanostructured materials. He has coauthored close to 180 refereed journal publications and 360 presentations in these areas. He is the author of the textbook Metal Matrix Composites (co-authored with K.K. Chawla).

Professor Chawla is a fellow of ASM International. He also serves on the Editorial Boards of Advanced Engineering Materials and Materials Characterization. His work has been featured



on the show *Modern Marvels* on the History Channel, *R&D News*, *Fox News*, and in the *Arizona Republic*. He serves on ASU President Michael Crow's Academic Council, which provides input to the president on academic, structural, and strategic matters.

Professor Chawla also is on the external advisory committee for Tech's Department of Materials Engineering and continues to support the Institute.

### distinguished service award

The Alumni Association presents the Distinguished Service Award to New Mexico Tech President Dr. Daniel H. López. Alumni and former NMTAA presidents John Dowdle and Paul Shoemaker introduced López at commencement.

Dowdle said "Here are some of the things I especially like about Dan: first, his fine taste and sense of beauty. Next, he is a warm, friendly man, always willing to talk to people and make them good with his big smile. He has the leadership skills necessary to take on tough

assignments such as budget cuts and stay positive."

Dowdle continued: "Finally, determination, drive and goal achievement-- just look around—at this campus, student body and faculty. Dr. López stands very tall in our estimation, especially when we see all that has been accomplished under his leadership since 1993.

Shoemaker praised Dr. López for his longevity, cooperative nature with the Alumni Association and his long-term vision for improving New Mexico Tech. "Soon after assuming his position as President, Dr. López set in motion a campus-wide strategic planning process whose hallmark was involvement of faculty, students, and staff in envisioning the university's future – the latest version of that plan covers the period from 2015 through 2020.

"He has fostered growth in enrollment, leading to the presence at Tech of almost 1900 degree-seeking Students – when I arrived at Tech in June of 1967 to study physics, total

enrollment stood at around 450, smaller than my high school graduating class."

"His skill at garnering funding for campus improvements is unsurpassed; since 1995 more than 50 projects have been undertaken, almost all of which are complete. His focus on diversity is well known. As an example, the number of women students has increased by 33 percent over the last 20 years. When I came to Tech, the male/female ratio was 6:1. Another example: In any given semester, over 40 countries are represented among the student population.

"He is indisputably one of the most, if not THE most effective lobbyists (I mean, legislative educator) this state has ever seen; Dr. López currently serves as chairman of New Mexico's Council of University Presidents. The Council focuses on student success, economic development, research and public service and promotes the outstanding efforts of university faculty and staff. It represents the

State's universities to the Governor, the Legislature, and the Higher Education Department.

Shoemaker closed by naming some of the campus highlights during López' tenure.

"Where would we be had Dr. López not competed for and won the job of President of Tech back in 1993? Students would still be living in Fitch. Physics lectures would still be given in Weir 120. The Mineral Museum would still be under lock and key in Workman. The influence of New Mexico Tech in Santa Fe would be limited to non-existent. Our vision for the future of New Mexico Tech would not be nearly as expansive as it is today. We would not have enjoyed almost a quarter of a century of growth, renewal, and leadership stability.

"We are indebted to Dr. López for his tireless efforts on behalf of New Mexico Tech, its academic programs, its research institutes, its students, and its graduates. I know I speak for all of us here today as I simply say to Dr. López -- "Thank You!"

# people you know

## 1970's

### **Timothy Oliver, P.E. '76**

Timothy Oliver, P.E., was recently hired as the vice president of project development for Lithium X Energy Corp. Oliver earned a bachelor's in environmental engineering from Tech in 1976.

"Tim joins us at a formative time for our company as we aim to rapidly advance our Clayton Valley lithium project, which has the potential to fuel future supply for the battery industry," said Paul Matysek, the company's executive chairman said. "His 38 years of experience as a specialist in mine project development engineering and environmental permitting is a tremendous asset to Lithium X."

Oliver's experience spans all stages of mine development, from exploration to closure. He is a registered professional engineer in four states and in Alberta, Canada. He previously spent more than 15 years with producing companies including Magma Copper Company, Exxon Minerals and Phelps

Dodge. Before joining the Lithium X team, Oliver practiced engineering both independently and with firms such as M3 Engineering and Technology and Tetra Tech.

## 1980's

### **Jeremy Epstein, '80**

Jeremy Epstein recently completed a four-year assignment at the National Science Foundation where he led the largest unclassified cybersecurity research program in the United States. Epstein holds a bachelor's degree in computer science from New Mexico Tech.

In February 2016, Epstein joined the Defense Advanced Research Projects Agency (DARPA), where he now leads security and privacy research programs. Jeremy moved to Virginia in 1986, and somehow never got around to leaving. His youngest child is a junior in high school. Epstein said he is looking forward to being an empty nester.

### **Ken Harris, '87**

Ken Harris, New Mexico Tech Class of

1987, has been appointed supervisor of the California Department of Conservation Division of Oil, Gas and Geothermal Resources.

Harris has been the executive officer for the Central Coast Regional Water Quality Control Board since 2012. He held multiple positions at the State Water Resources Control Board from 1987 to 2012 including assistant deputy director, supervising engineering geologist, assistant director and senior engineering geologist.

Harris was interim assistant executive officer for the Los Angeles Regional Water Quality Control Board from 2010 to 2011 and a staff geologist at the San Lorenzo Valley Water District from 1983 to 1984. He holds a Master of Science degree in hydrology from Tech.

### **Dr. Guillermo Francia '88,'92**

The U.S. Department of State has named Dr. Guillermo Francia a Fulbright Scholar, one of the most prestigious



**Dr. Francia** honors achievable in academia.

A Jacksonville State University computer science professor, Francia joined the JSU faculty in the Department of Mathematical, Computing and Information Sciences in 1994. He holds a bachelor's in mechanical engineering from the Mapua Institute of Technology in the Philippines. He earned his master's and doctorate in computer science from Tech in 1988 and 1992, respectively.

An information security and assurance expert, Francia is a recipient of the Fulbright Cyber Security Award from the U.S.-U.K. Fulbright Commission. He has received funding to travel and reside in London during spring 2017, where he will join a group of prominent cyber security experts at Imperial College London

to perform research on critical infrastructure security. He will be part of the first wave of American researchers who will be going to the United Kingdom as part of the 2015 Obama-Cameron bilateral agreement to strengthen cyber security research collaboration between the two countries.

“I am deeply humbled and honored to receive this award and truly grateful for the steadfast support from colleagues and administrators in my effort building a robust information security and assurance academic program at JSU,” Francia said.

In November, two of his projects received grants from the National Science Foundation, the U.S. Department of Defense and the National Security Agency. The grants totaled more than \$364,000 and are being used to strengthen cyber security research and education at JSU and throughout North Alabama.

The Fulbright Program was founded in 1946 by Senator J. William

Fulbright to increase mutual understanding between the people of the U.S. and other countries. More than 360,000 of the nation’s brightest students and professors have participated in the program over the past 70 years and 53 Scholars have gone on to win the Nobel Prize.

#### **Bret Moffett ‘86**

Bret Moffett has been appointed chief executive officer of POWER Engineers Inc. (POWER). The global consulting engineering firm has headquarters in Hailey, Idaho.

Moffett holds a bachelor’s in computer science from New Mexico Tech and a master’s in business administration from Boise State University. He is also a graduate of the Stanford University Graduate School of Business Executive Program.

“We have an incredible team at POWER,” Moffett said. “I’m energized, excited, and more than a little humbled to be part of this great organization.”

Moffett has served as

POWER’s president for the past year and will continue those responsibilities as he assumes the additional role of CEO. He will be POWER’s third leader in the firm’s 40-year history. POWER specializes in the delivery of integrated solutions for energy, food and beverage, facilities, communications, environmental, and federal markets. According to the firm’s website, POWER offers complete multidiscipline engineering, architecture and program management services. Founded in 1976, it is an employee-owned company with more than 2,300 employees in over 45 offices throughout the United States and abroad. Moffett joined POWER in 2000 as a software engineer and project manager and applied his expertise to a wide range of projects across multiple divisions. He was asked to lead the firm’s back-office operations in 2006. The company reports Moffett has successfully helped POWER better serve the needs of its clients, shareholders

and employees through organic growth and 15 acquisitions.

#### **1990’s**

**Dr. Vasant Joshi ‘93, ‘96** New Mexico Tech alumnus Dr. Vasant Joshi, senior materials scientist at the Naval Surface Warfare Center Indian Head Explosive Ordnance Disposal Technology Division (NSWC IHEODTD), has been co-awarded the Delores M. Etter Award for Top Scientists and Engineers for 2014.

The award was established in 2006 and is named for Dr. Delores Etter, former assistant secretary of the Navy for research, development and acquisition, and recognizes Navy civilian and military personnel for exceptional science and engineering achievements.

Joshi holds a doctorate in materials engineering from New Mexico Tech and conducted research at the Energetic Materials Research & Testing Center (EMRTC) along with his advisor Dr. Osman Inal. During a ceremony held at the Pentagon in

2015, Joshi shared the award with his NSWC IHEODTD colleague Greg Young, propulsion engineer and program.

Young and Joshi were recognized for development of a hybrid rocket fuel that performs as well as solid rockets while creating a safer system that is throttle-able and has the ability to be stopped and restarted in flight. The new boron-based system overcomes traditional difficulty of inefficient combustion with boron by elimination of hydrogen in the composition. The increased performance was demonstrated in 2014 using a sub-scale rocket motor test stand constructed at the command.

“We’re extremely proud of Dr. Joshi and Dr. Young,” said NSWC IHEODTD Technical Director Ashley Johnson. “Their work on Hybrid Rocket Propulsion represents a significant advancement in technology by introducing the possibility of throttling a rocket motor that allows for greater

mission flexibility. This could provide missiles the ability to loiter then accelerate to engage once the target is acquired. Their accomplishment required exceptional technical rigor and a strong understanding of combustion, rocket propulsion and the underlying sciences. It also represents this command’s commitment to develop and transition new products and services that increase warfighting capabilities.”

NSWC IHEODTD – a field activity of the Naval Sea Systems Command and part of the Navy’s Science and Engineering Enterprise – is a leader in ordnance, energetics, and EOD solutions. The Division focuses on energetics and ordnance research, development, testing, evaluation, in-service support and disposal; and provides warfighters solutions to detect, locate, access, identify, render safe, recover, exploit, and dispose of explosive ordnance threats. Since 2010, NSWC IHEODTD scientists and engineers

have earned nine of the Delores M. Etter awards.

### 2000’s

#### **Andrew Anders ‘04**

has been promoted to associate by the law firm of Keleher & McLeod PA in Albuquerque. Anders previously worked as a law clerk for the firm, which he joined in 2014. He formerly worked as a senior engineer at Emcore Photovoltaics. Anders earned a bachelor’s in materials engineering from the New Mexico Tech in 2004. He also earned a master’s degree in business administration as well as a law degree from the University of New Mexico. Anders was admitted to the State Bar of New Mexico in 2015.

### 2010’s

#### **David Krzesni ’13**

David Krzesni, who attended New Mexico Tech from 2010-2013, recently published his first book, “Pedagogy for Restoration: Addressing Social and Ecological Degradation Through Education.”

Holding a Bachelor of Science in mathematics with a minor in Earth

science, Krzesni said the work ethic and research skills that he learned at Tech were invaluable. He said he took one course on education at Tech with Michelle Osowski and what he learned from her rivaled his graduate studies.

Krzesni’s new book seeks to understand the conditions leading to the destruction of Earth in order to discover pedagogy for restoration.

“As we degrade the planet we degrade ourselves and as we degrade ourselves we degrade the planet,” he said. “Moral development and socialization significantly influence our participation in, construction of, or resistance to the systems of oppression that degrade us. The process of restorative education recognizes that humans are fundamentally good and moral and seeks to promote healthy moral development. We must help students meet their basic needs, center their own identities and experience, and simultaneously emphasize community and

relationships to help them find a sense of purpose. These efforts facilitate social and ecological restoration by allowing students to reach a physical and emotional place that is conducive to learning and self-efficacy so that they may engage with whatever issues they find important in their own way and on their own terms.”

**Colin DeGroot ‘11**  
New Mexico Tech alumnus Colin DeGroot was surprised to receive the Milken Educator Award and \$25,000 on Feb. 24, 2016. Working at ASK Academy – a small, independent nonprofit charter school in Rio Rancho that focuses on STEM innovation – DeGroot makes science come alive by developing relevant, fun and powerful learning experiences for students. He received a Master of Science Teaching from Tech in 2011.

The Milken Educator Awards was conceived by the Milken Family Foundation to attract, retain and motivate outstanding talent to the teaching profession. It is

the nation’s preeminent teacher recognition program, dubbed the “Oscars of Teaching” by Teacher Magazine. Since 1987, the Milken Family Foundation has devoted more than \$137 million in funding to the Milken Educator Awards, including over \$66 million in individual awards to more than 2,600 recipients. The foundation also provides powerful professional development opportunities and networking with leading education stakeholders.

**Sohaib Soliman ‘13**  
New Mexico Tech alumnus Sohaib Soliman, a third-year student at the University of Washington School of Dentistry, was elected president of the American Student Dental Association in March.

Soliman previously held other ASDA positions including district trustee, district legislative chair and University of Washington community service chair. A native of Socorro, N.M., Soliman received his bachelor’s degree in biology at the Tech in 2013. Sohaib served two



Sohaib Soliman

years as the president of the SGA at Tech and won [the Brown Award in 2013.](#)

As a dental student, he launched a partnership between a local ASDA chapter and the Washington Oral Health Foundation in 2014 to provide drug and oral health education to at-risk youth in the Seattle area. Soliman’s other volunteer activities have included helping to provide dental screenings for migrant farm workers at Seattle’s Casa Latina clinic, providing dental services to clients at Seattle’s Union Gospel Mission clinic, and working with the Teeth and Toes program, which enlists UW health

sciences students to provide foot exams and dental screenings to Union Gospel Mission shelter residents

“We’re all enormously proud of Sohaib, who had already established himself as an outstanding leader even before this,” said School of Dentistry Dean Joel Berg. “Sohaib really exemplifies the values we hope that all of our students will share, and I know that he’ll continue this record of achievement as ASDA president.”

Founded in 1971, ASDA maintains chapters at each of the United States’ 65 dental schools, with membership encompassing nearly 90 percent of all students. Beyond its advocacy for dental student concerns, the organization also lobbies legislators on issues such as funding for the National Institute of Dental and Craniofacial Research and legislation including the Protect Medical Innovation Act and the Meth Mouth Prevention and Community Recovery Act.

# in memoriam

## **Lloyd Ray Alexander**

Lloyd Ray Alexander, New Mexico Tech Class of '72, passed away on Oct. 9, 2015, due to complications from heart valve replacement surgery. He was 68.

After graduating from Tech with a bachelor's in metal metallurgical engineering, Lloyd had a diverse career that spanned almost forty years. His resume included positions at Molycorp, Cyprus Pima Mining, Oracle Ridge Partners, San Manuel Copper, and Performance Associates International.



Lloyd Ray Alexander,

A resident of Tucson, Ariz., Lloyd is survived by his daughter Laurel, son David, and brother Danny. His loss is also mourned by his two long-time friends

and former Tech students, Dennis Heran and Rocky Kloster.

## **J. Jason Aragon 1990 – 2016**



J. Jason Aragon

J. Jason Aragon went to his eternal home April 27, 2016. Born April 23, 1990, he lived life with full joy whether snowboarding, dancing, hunting, playing rugby or performing martial arts. He was a graduate of Valley High School and earned his bachelor's degree in mechanical engineering from New Mexico Tech. He touched many lives with his infectious smile and love-of-life personality. He is survived by his mother Yolanda Aragon; the love of his life, Anaissa

Salgado.

## **Mary B. Aguilar**

Mary B. Aguilar passed away Sunday morning, June 5, 2016, while surrounded by her family. She was born to parents Estevan G. Baca and Griselda Baca in Socorro, NM. Her great-grandparents, Estevan and Catalina Baca, were prominent citizens of Socorro and were instrumental in the critical land donations that helped create The New



Mary B. Aguilar

Mexico School of Mines (today New Mexico Tech), in which Mary took great pride. As a young girl, Mary took great interest in her father's shorthand and moved to Los Angeles to attend Webster Business

College. She then returned to Socorro where she married Joe V. Aguilar and worked as a stenographer, a teller at First State Bank, and as a secretary at New Mexico School of Mines. Then in 1961, Mary began a cherished career as a legal secretary, where she was able to apply the lost art of shorthand and could type faster than pretty much anyone in the County. She started this career with attorney Eldon Douglas and in 1968, when Douglas was appointed chief prosecutor, Mary began her career with the District Attorney's Office for both Democrat and Republican officeholders, a career that would endure for more than two decades. Outside of the office, Mary enjoyed many activities, she participated in a number of bowling leagues, was a member of the Socorro Woman's Golf Association, and played countless rounds of golf at her favorite golf course, New Mexico Tech. But of the many things Mary enjoyed she most loved dancing to her favorite music at the San Miguel Fiestas and the Capitol

Bar where she could be found dancing until the last set was played. Mary was married to Joe V. Aguilar for 32 years, who preceded her in death in 1981. She is survived by her two daughters Benita Alexandre and Joanna DeBrine and husband Earl.

**Thomas Boyd, Jr.  
1932 – 2015**

Thomas Boyd, Jr., born July 28, 1932 in Happy, Texas, to Thomas Martin Sr. and Jessie Ruth Lash Boyd, died Oct. 31, 2015 in Albuquerque, N.M. Tom is survived by his son, Darin of San Francisco. He is preceded in death by his parents; brother, Bob; and son, Kyle.

Tom was a standout Artesia High School “Bulldog” athlete in the football, basketball, baseball and track teams. After serving in the U.S. Army, he graduated with honors from New Mexico Tech in 1960 with bachelor’s degrees in petroleum engineering and geology.

A roustabout then driller before college, he then worked for several oil

and gas companies in Texas, New Mexico, Colorado and Canada, before spending the majority of his career as an independent oil and gas operator, land man, and geologist in Roswell and Ruidoso, N.M.

He enjoyed hunting and fly-fishing and was an avid golfer. Several especially memorable experiences included playing in the same foursome with Arnold Palmer and then with Jack Nicklaus and he often played in the Oilmen’s Executive Association Golf Tournament. His favorite courses included the Alto Lakes Golf Course in Alto, N.M. and the Jasper Park Lodge and Banff Park Lodge, both in Alberta, Canada.

Memorial donations may be made to the NM Tech Scholarship Fund, the Alzheimer’s Association, or the charity of your choice

**Stanley Livingston Bryn  
1927—2016**

Stanley Livingston Bryn, 88, of Socorro, passed away peacefully on Thursday, January 7,

2016 at his home after a long period of declining health. He was born in San Francisco on August 8, 1927 to Stanley Lewis Bryn and his wife, the former Margot Livingston.

He was raised in Reno, Nevada where he attended school. The day after his 17th birthday he enlisted in the United States Navy and served as a radio technician aboard the USS Alabama in the last year of WWII. After the war, he served two years in the naval reserve and later enlisted in the United States Air Force Reserve at the outbreak of the Korean Conflict. For many years after, Stanley worked in the Electronics field before beginning his first business, Ditric Optics in Massachusetts. Always a man with a traveling

bug, he soon got restless and moved to Australia where he lived for seven years, enjoying one of his many hobbies, which was opal mining. After Stanley’s return to the states he began a company in California then moved to Socorro and started Intor Optics which he and his wife, Jacqueline have owned and operated since 1994. Stan always continued his interest in Naval ships and for the last 15 years traveled the country with his wife repairing the radio rooms on many WWII Memorial Ships including the USS Alabama, USS Massachusetts, USS North Carolina, and the USS John W. Weeks in Texas. He also donated all of the equipment to build a memorial radio room for the USS Indianapolis. Stanley was a member of the Socorro Ham Radio Club and an avid Radio Operator for many years. Stan enjoyed traveling the world with the highlight of having the opportunity to visit China and walk on the Great Wall. The greatest honor of his life however came in 2010



Stanley Livingston Bryn

when he was awarded an Honorary PHD in Electrical Engineering from New Mexico Tech. Stanley was married to his wife and soul mate, the former Jacqueline Avey. He leaves a son, Steven Bryn and wife, Elaine of Maine; and a daughter, Darlene Swan and husband, Bob of Nevada. He was also father to the Late Robert Bryn; three stepdaughters, Marie Avey of Florida; Deborah Matcham and husband, Alex (Rod) of Socorro; and Brenda Bordagaray and husband, Eric of California.

In lieu of flowers, memorial contributions and donations may be given in Stan's honor to: New Mexico Tech Scholarship Fund at [nmtech.edu](http://nmtech.edu) - select "Be a Donor" note "In remembrance of Stanley Bryn". To view information or leave a condolence, please visit [www.danielsfuneral.com](http://www.danielsfuneral.com).

**Alex Hernandez  
1990—2016**

Alex Hernandez, 26, died Saturday, Jan. 9, 2016, in Socorro, N.M. He was born January 6, 1990 in

Albuquerque, N.M. He is survived by his parents, Jorge and Maria Hernandez; sisters, Valerie Garduno, Natalie M. Rey and her husband, John.

New Mexico Tech awarded Mr. Hernandez a posthumous bachelor's degree in computer science at the 2016 Commencement Ceremony. His parents, Jorge and Maria Hernandez, accepted his degree on his behalf. Alex began school at Tech in 2011. He was a true "Renaissance man," having already completed diverse coursework in acting, chemistry, film, language, nutrition, philosophy, physics, and psychology. Alex said his goal as a student was to "spread cultural awareness and acceptance at New Mexico Tech." Alex was known as a kind, motivated, curious and determined young man.

His passion for the environment, nature and animals led him to lead the life of an activist. He was also acutely interested in music, dance and literature. Alex completed internships

at the University of New Mexico and the National Center for Genomic Research in Santa Fe during the summer of 2015. His experience at NCGR provided him with inspiration for his path forward from NMT to a job focused on artificial intelligence and biology. He was already in discussions with numerous companies, notably Google. Alex graduated from Public Academy of Performing Arts High School; He was expected to graduate in May 2016, from New Mexico Tech. Some of his interests included hiking, rock climbing, camping, and rock music festivals. He was a DJ for world music. He also had a love for cats, dogs and animal welfare and he cherished the earth, the trees, and the mountains. Alex was planning to move to Oregon after graduating from Tech to pursue a career in artificial intelligence and biotechnology.

**Edward James Pittinger,  
Jr., 1958—2016**  
Edward James Pittinger,

Jr., son of Jeanne M. and the late Edward J. Pittinger, died unexpectedly as a result of a traffic accident on Friday, April 1, 2016, near Midland, Texas.

Ed was born in Hazleton, PA on February 2, 1958. He attended Holy Trinity German Catholic School and graduated from Bishop Hafey High School. He studied at Luzerne County Community College and transferred to New Mexico Institute of Mining and Technology where he earned a Bachelor of Science degree in Petroleum Engineering and later became a registered professional engineer. Ed established his home and professional career in Midland. He married the love of his life, Karen Kite, on September 21, 1985 in Hazleton PA. He was known as EJ to his hometown family and friends. He was a thoughtful and extraordinary man, devoted to his family, profoundly spiritual and reverent toward all life. His legacy of honor, generous spirit, charity,



love, wisdom and fidelity will endure through his family and all he touched throughout his life.

Ed was the owner of EKP Investments and was actively developing this company until the time of death. Ed served as the Senior Vice President and COO of Lynx Operating Company from 2009 until he retired from the company in 2016. Prior to joining Lynx, he held various positions in the petroleum industry.

Ed was an active member at St. Ann's Catholic Church and was a member of the Knights of Columbus.

Ed is survived by his wife, Karen; daughters, Dana Ellis and her husband Mark, Laura and Carlye. Online condolences can be made at [www.npwelch.com](http://www.npwelch.com) (<http://www.npwelch.com/>).

**David Olaf Paxton  
1927– 2015**

David Olaf Paxton passed into eternal rest on Jan. 4, 2015, after a brief illness. He was born Nov. 2, 1927 in Philadelphia, Penn. When Dave was two months old, his father

Emery Paxton died. His mother, Ruth Bursum Paxton returned to New Mexico with Dave where he grew up in Socorro. Up until he was 14, he spent part of each summer visiting his great aunt, Dora Foster in Colorado Springs. Dave traveled as an unaccompanied minor on the Santa Fe Railroad and often reminisced that his summers in Colorado Springs were perhaps some of the most enjoyable summers in his life.

As a teenager, Dave worked summers on his grandfather's ranch where he developed his love of hunting and camping. Dave graduated from the New Mexico Military Institute in 1945 and briefly attended UNM and New Mexico Tech.

During his distinguished military career of 24 years, which included a three-year stint in the Navy aboard the U.S.S. Hancock – an aircraft carrier. Dave saw combat in three wars: World War II, Korea and Vietnam. Serving briefly as a lieutenant with the Socorro Artillery Battery of

the New Mexico National Guard, Command Sergeant Major Paxton was ordered into active federal service in 1951 and later was assigned to various Anti Aircraft Artillery organizations in Korea and Japan, and finally worked for the defense units at Hanford Atomic Works in Washington state. He was highly decorated during his years of service and awarded the Legion of Merit, the Bronze Star, the Purple Heart, Air Medal, and Meritorious Service to name a few.

In 1957, he was selected for assignment with the Army Security Agency serving stints in Fort Devens, Mass., Arlington Hall, Va., Germany, Vietnam, and Panama. After retiring from the military, Dave worked for the Sheriff's Department in Albuquerque. Later he worked for the Social Security Administration in Santa Fe, Hobbs, and Albuquerque until his retirement. In addition to working hard, Dave had a great passion for various hobbies. Over the years, he enjoyed breeding and raising champion show

Dalmatians.

He was an avid photographer who was skilled in developing his own film. Following retirement, Dave earned his license to fly private planes and even purchased his own plane. Dave enjoyed playing duplicate bridge; he was a director in Hobbs and continued playing in Albuquerque at the Duke City Bridge Center and Sandia West Duplicate Bridge at Taylor Ranch.

He was an ardent reader and also enjoyed cribbage games with his retired military buddies and was a member of the ROMEOS (Retired Old Men Eating Out). Dave was preceded in death by his first wife Nancy Lee (Shulthies) Paxton, his father Emery Foster Paxton, his mother, Ruth Bursum (Paxton) Harban, his stepfather, Robert C. Harban, and his grandfather, Senator Holm O. Bursum, Sr. He was loved and will be greatly missed by his family.

**Lars Steven Wakeman  
1950—2016**

Lars Steven Wakeman of

White Oaks, N.M. died on March 16, 2016, in Alamogordo, N.M., from complications of brain cancer.



Lars Wakeman (right) at the Red Cloud Mine near Yuma

Lars is survived by his mother Naime Wakeman of Florida, brother Robert of Rhode Island, and brothers Burt and Ted of Hawaii. He was preceded in death by his father Robert T. Wakeman. Lars was born on Jan. 6, 1950, in Westport, Conn., to Naime and Robert Wakeman. His early years were spent on the family farm which provided fresh produce to the local community.

He graduated from Staples High School in Westport in 1968 and shortly thereafter moved West to pursue his passion prospecting for gold and other minerals. In 1973, Lars graduated with a bachelor's degree

in geology from the New Mexico Institute of Mining and Technology. Shortly thereafter, he pursued his love of prospecting, locating several mining claims in different areas throughout the southwest. Lars spent a few years working for various mining and drilling companies including Climax Molybdenum, Phelps, Dodge, and others. At the time of his death, he was prospecting a gold claim in White Oaks. Lars was an accomplished prospector, song writer, and author.

He copyrighted many poems and songs and wrote a children's book, "Harry the Hairy Prince" published by Trafford Publishing Co.

### ***Roland Hatcher Williams*** ***1944—2015***

Roland Hatcher Williams is being lovingly remembered by family and friends since his passing on March 22, 2015. Roland was the first and only son of Roland William Hatcher and Irene (Scott) Williams, born on May 22, 1944, in Mingo



Roland Hatcher Williams

Junction, Ohio.

The early passing of his father and Roland's own health compelled a move to the more favorable climate of Arizona where Irene met and married Robert Williams. Roland graduated from New Mexico Tech with a bachelor's in chemistry.

His first career included the construction of batteries for specialized military and aeronautical needs. Roland is the man who made the batteries that got Apollo 13 back to Earth. His later career was as a chemical engineer for the Bureau of Engraving and Printing in Washington, D.C. He later had the position of executive secretary for an international intaglio printing research group.

He researched and promoted anti-counterfeiting techniques with and for banks of most North American and European countries. He lived in Burke, Va., during those years. Roland had a casual and likable personality that enabled him to appreciate and mingle with people from many walks of life. His career took him to places both near and far where he was comfortable with anyone in his surroundings.

Roland met and married his wife, Suzan Elaine Rockwell, in central California in 2000. They enjoyed many travels together with friends and relatives throughout the country over their 15 years together. He is survived by Suzan; his daughter, Karen Williams of Auburn Hills, Mich.; his son, Dr. Matthew Williams of Willoughby Hills, Ohio; five grandchildren and two great-grandchildren.

Contributions may be made to the Roland Williams Memorial Scholarship Fund at Bank of the Pacific in Anacortes, Wash..

Isabella “Izzy” Dewers always knew she wanted to study science. Growing up in Norman, Okla., Izzy learned about New Mexico Tech from her father, a geologist at Sandia National Laboratory.

“My dad told me Tech is a good school, especially in science, and a small school where I’d get more one-on-one time with professors,” Izzy said. “Plus Tech offered me more scholarships than the other schools I applied to.”

She soon found that her dad’s advice rang true. She pointed out her three research advisors as being particularly helpful and responsive – Dr. Sanchari Chowdury, Dr. Jamie Kimberly and Dr. Donghyeon Ryu.

Izzy started her career at Tech as a petroleum engineering major, but soon switched to the Chemical Engineering Department.

“I enjoy chemistry a lot and I feel like I can do a lot with this degree,” she said.

Her Senior Design Clinic team project was “Synthesized Nanoparticles with Mechanoluminescent Effects.” She and her team designed a chemical plant to manufacture nanoparticles that would facilitate monitoring of structural integrity. Their project has applications in aircraft, spacecraft, buildings, bridges and other structures.

“I think the senior design clinic experience is extremely important,” Izzy said. “That has prepared me the most to work in industry. Here at Tech, you can do independent research and we have access to labs. Compared to students at other universities, we have more opportunities for research and more access to laboratories. We have access to real cool machines here at Tech.”

During her time at Tech, Izzy has been involved with several student clubs, including the Society of Petroleum Engineers and American Institute of Chemical Engineers. She currently works at



the New Mexico Mineral Museum, which she called an awesome job.

“Mineral collecting is now a hobby of mine,” she said. “I’ve also met a lot of people through working here. Plus, I’ve had a chance to use the X-ray Diffraction, and even used it for our Senior Design project.”

Through the Museum, she’s also gained volunteer experience at the annual Mineral Symposium and the New Mexico Science Olympiad.

Izzy will finish her bachelor’s in December

and then will pursue graduate school, possibly in materials engineering. “I kind of want to materials engineering because I’ve really enjoyed those classes and it really interests me,” she said.

What advice would she give to incoming freshmen?

“Find a mentor,” Izzy said. “If you can connect with an upperclassmen to help you stay motivated to work hard, that helps a lot. And, of course, go to class and do your homework. It’s definitely worth the time.”



**New Mexico Institute  
of Mining and Technology**  
801 Leroy Place  
Socorro, NM 87801

[www.nmt.edu/advancement](http://www.nmt.edu/advancement)  
[www.nmt.edu/gold-pan](http://www.nmt.edu/gold-pan)  
[www.nmt.edu](http://www.nmt.edu)

