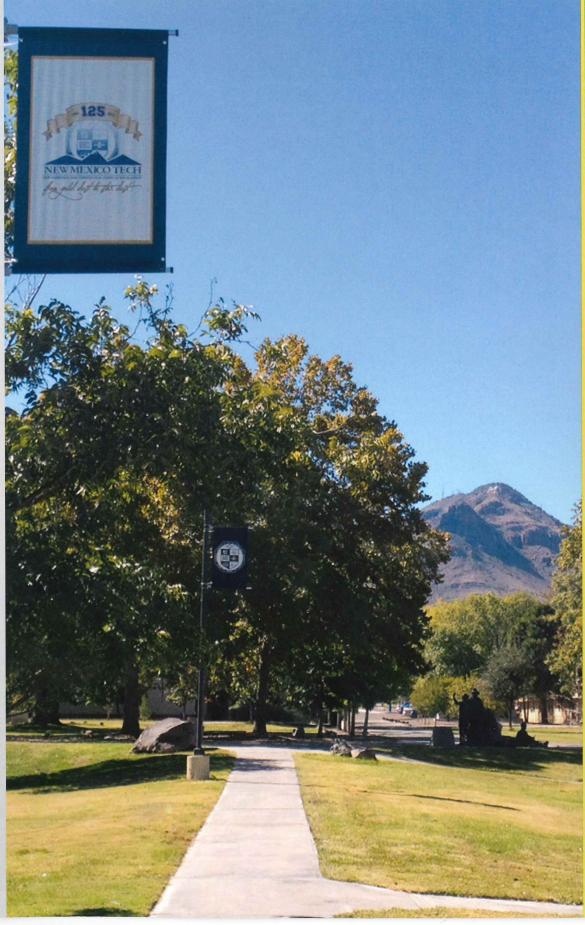
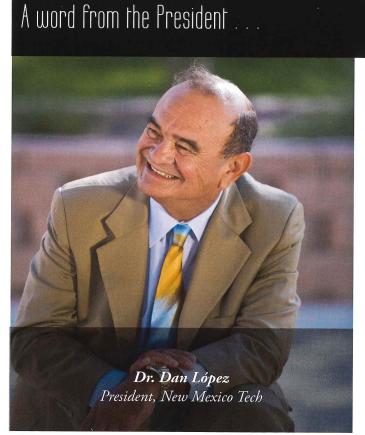


GOLD PAN

ALUMNI MAGAZINE FALL 2013









Dear New Mexico Tech alumni,

The new school year brings with it plenty of good news at New Mexico Tech. Now that we have dedicated the new Steve S. Torres Residence Hall, we are moving on to construction of the \$24 million building for the Bureau of Geology. This new building will anchor the northeast corner of campus and will be a beautiful achievement for a long-deserving research unit on campus.

For the third year in a row, we have set a new record for the largest student body, with 2,134 students. So, the completion of the new dorm couldn't have come at a better time!

New Mexico Tech continues to be a leader in science and engineering education and we are regularly recognized for our high-quality, affordable education by every method of ranking universities. We can always use your help to support the university. Our Office for Advancement and Alumni Relations is launching the Alumni Fund Campaign and I encourage you to consider contributing to our efforts. New Mexico Tech

provided the foundation for many successful careers and we hope our alumni are willing to give back to the university.

As always, I encourage you to visit our campus and re-connect with friends, colleagues and your former instructors. You should feel free to stop by my office as well. I always welcome visits from Tech graduates!

mil d. Hy

Sincerely,

Dr. Daniel H. López President, New Mexico Tech



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GOLD PAN

Greetingsl



Letter from the Director Office for Advancement October 2013

Hello Techies!

Change is constant. Another school year has begun. Each graduation symbolizes the end of a cycle and the beginning of

a new one. Traditions come and go as well. I hear your stories from your time at Tech (or the School of Mines, depending upon your era) and I wonder what stories our current students will be telling in fifty years? What current traditions at Tech will become lasting rites? Time will tell.

This is the part of my job I enjoy most—hearing your stories and reminiscences about how Tech used to be: Saint Paddy's Day, scavenger hunts, the Tin Can, spelunking in old mine shafts, pranks played on the poor defenseless Lobo at the school up the highway, tunnels under campus, the ... well, you get my point. Each of you have such remarkable memories of Tech and its traditions. I encourage you to take the time to send stories of Tech traditions, jokes and other memorable moments from Tech. As we gear up for the 125th celebration next year—bring these stories out before they are lost.

Even as we search for the newest Tech traditions we are reminded that "change is constant." Traditions change and the campus changes as well. We opened a new dorm in September—the Steve S. Torres Residence Hall, and will be hosting a groundbreaking in January, 2014 for the new Bureau of Geology that will transform the corner of Leroy Place and Bullock. The old ISD building has been demolished and the sound of construction on campus feels constant. "Change is good."

As I am constantly reminded, Tech is not just a campus and it's not just a random group of people, current students or stellar faculty. We are a family. You are the tradition. You are Tech.

In proud friendship,

Colleen Guengerich Director, Office for Advancement and Alumni Relations

TABLE OF CONTENTS

ALUMNI MAGAZINE

reatures
From the President 2
Letters 4
Snezna Rogelj , Biology
Research5
The Vigilante Band
Memories of a Miner8
Bill Macey:
A Tech Success Story 16
49ers 201328
Tales of Three Techies 30
Comon Coming 22
Career Services
Career Services33
Departments Calendar25 Construction
Departments Calendar
Departments Calendar
Departments Calendar
Departments Calendar
Departments Calendar
Departments Calendar
Departments Calendar

Toll-Free Numbers 1.800.428.TECH (8324)

Admission:	Press 1
Financial Aid	.Press 2
Graduate Office	.Press 3
Advancement	.Press 4
Housing	.Press 5
Registrar	.Press 6

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

John Dowdle

President, NMTAA

Greetings to NMT Students, Alumni, supporters, and friends.— This letter is intended to provide information on the NMTech Alumni Association and the future role it should have.

The Mission of the NMTAA is "...to



encourage John. Dowdle
a lifelong interest in the
University by its alumni
and friends through
a variety of actions,
events, services and
communications". A key
goal for the Association
is to promote positive
relationships and provide
mutual support among
the University and its
Office of Advancement,
students, alumni, and the
communities it serves.

Defining the strategies, roles, and responsibilities of each party is important to the ongoing success of the entire University as well as NMTAA.

During the coming year, leadership in developing

a plan for meeting the challenges inherent in its mission will be provided by the NMTAA's Board of Directors. It consists of Harvey Westbrook, Past-president; John Dowdle, President; Paul Shoemaker, Vice-president and President-elect; Geza Keller, Treasurer; Linda Baumert, Secretary; and Steve Dixon, Charlie Goodman, Richard Miller, and Brett Wendt, Directors. In addition, Louise Chamberlin, who served on this year's Board, will provide liaison at the Socorro campus.

Alumni—be alert. The leadership team will be reaching out to you for your thinking and involvement. In particular, please consider what role each of you can play and your contribution this year. It will be greatly appreciated.

Please feel free to contact John Dowdle at *John*. *Dowdle@booz.com*

Letters to the editor of Gold Pan may be submitted to lrobinson@admin.nmt. edu.

Save the Date 49ers 2014 October 16-18 Celebrate the 125th Anniversary of New Mexico

Celebrate the 125th Anniversary of New Mexico Tech at the 49ers Homecoming next year.

Mark your calendars now!



What was Tech like when you were here? Who or what do you miss most? What traditions would you like to see restored? Contact Colleen:

cguengerich@admin.nmt.edu

research

chemical biology research represents fertile training ground by thomas guengerich

When one thinks of research universities that are coming up with discoveries worthy of patents, the first institutions that probably come to mind are Ivy League schools and other private, well-funded schools.

Yet New Mexico Tech recently patented one anti-cancer compound and has two more promising concepts in the pipeline.

The Chemical Biology & Screening Collaborative Core was first funded five years ago by the New Mexico IDeA Networks of Biomedical Research Excellence, or INBRE. The group, headed by Dr. Snezna Rogelj of the Biology Department, has included four professors, a research associate and an army of students. Over the past five years, more than 50 undergraduate and graduate students

have participated in the program, virtually all of them on a volunteer basis.

While the patents—accepted and pending—are certainly a feather in Tech's cap, Rogelj said she's most proud of the accomplishments of the students who have participated in this ongoing and ambitious project.

"One major goal is to prepare students for their future roles as researchers and medical practitioners," she said. "We have integrated the process of learning science survival skills with the process of discovery. This research helps students get into medical school and graduate school... and then do well there. I am very proud of my students. That's something that makes it all worthwhile."

"We are very fortunate to have had INBRE", said Rogelj. Still, the project works on essentially a shoestring budget, with the grant money covering only one research professor and one research associate full-time.

"We've had to make ends meet," Rogelj said. "We have no graduate research assistantships. Graduate students teach classes; that actually has been good for them. Then they come into the lab and do the research they've dreamed of—with limited funds."

Rogelj had a good taste of the research life at a well-funded institution. She completed a post-doc at M.I.T.'s Whitehead Institute, then worked at Harvard University.

"Yes, I published in *Nature.* I rubbed elbows with Nobel laureates, with reporters everywhere," she said. "Research was



Kathleen Huynh, an undergraduate student in Chemical Engineering and a Chemical Biology & Screening Collaborative Core student research assistant, is culturing human cancer cells and testing them for sensitivity to CBSCC-designed compounds.

trouble-free. We had all the instruments available. We had individuals and companies wanting to give us money, just to be affiliated with the university. But I said, 'To hell with this. It is easy to do great science here but I can do it anywhere'."

She took a position in Bangalore, India, studying brain parasites for three years. Then, she and her husband, Dr. Vivek Dhawan, moved to New Mexico in 1992 when Dhawan started working at the NRAO. Rogelj came to Tech soon thereafter.

"Good science can also be done on a small scale. We may be slightly above garage science technologywise, but we are creative and willing to work hard," she said. "They say, 'It takes a village ...' and the same thing is true here when it comes to students. We have a nurturing interdisciplinary environment and solid training. We do it from scratch."

The research project into the chemistry and biology



The clear area in the center of this MRSA culture plate demonstrates how efficiently IM9 killed multidrug-resistant Staphylococcus aureus where the drug-treated cells were additionally irradiated for 2 minutes with plain white light.

of antimicrobials and anti-cancer agents actually started about 10 years ago, fully five years before the first round of INBRE funding arrived in 2008. Then the work really took off.

The faculty team has included chemist Dr. Alex Kornienko, who recently left for the University of Texas, but is still very active with the team; organic chemistry professors Dr. Liliya Frolova and Dr. Igor

Magedov, who passed away earlier this year; and Rogelj, the CBSC director.

Rogelj is quick to pass around credit to her colleagues and the students, reiterating that this project requires a team effort. "We're kind of a family," she said. "The students come to our weekly meetings because they want to and are interested. And they're not just focused on their own project but the whole

discovery process." Students, primarily in biology and chemistry, learn a host of laboratory techniques, such as synthesizing and characterizing new chemical compounds, growing bacteria and cancer cells, measuring baseline activities by identifying drugs that cause toxicity or don't, describing cellular responses, determining how much light is needed for photosensitive drugs and studying drug interactions.

"A lot of people are coming around to understand that multiple drugs affect each other's outcomes. One of the new drugs, IM9, for example," Rogelj said, "preferentially binds to the deadly MRSA bacteria. We could say it's the bubblegum that clogs bacterial antibiotic-resistance machinery."

When combined with the standard antibiotics, the otherwise non-toxic IM9 disarms the cell's resistance and makes it again sensitive to the antibiotics. Moreover, this drug is

fluorescent, so the drug can be further activated into a killer compound by shining plain light onto the drug-infused target area. Rogelj said this photodynamic approach works against bacteria and against cancer cells. IM9 would also be an excellent method of sterilizing equipment or wounds

in the field, she said.

Medical personnel will be able to spread a thin film of the compound on a wound or an instrument and sterilize using just a flashlight. She expects this project to be successful, but will require a huge effort before transitioning into practical use—and being a bit careful about

disclosure until the patent is processed.

"We want to make sure that Tech gets credit for this—intellectually and proprietarily," she said.

"We need to remain secretive—sometimes to the detriment of progress or access to funding. We are grateful to Tech for footing some of the costs over the next two years." So, in spite of the changes in NIH funding, the CBSC team will continue to work, train students and research these compounds at Tech, hoping to eventually bring some new medicines onto the market.



Chemical Biology & Screening Collaborative Core, left to right: Mary Rose Reisenauer, Cody Champion, Seth Henry, Amanda Peretti, Moaaz Soliman, Leslie Edwards, Dr. Liliya Frolova, Paul Bianchi, Dr. Snezna Rogelj, Isaiah Otero, Anntherese Romero, Nikki Porch, Dr. Alexander Kornienko, Marco Masi, Dr. Igor Magedov, Sohaib Soliman, Robert Lebrun, Gina Nguyen and Elaine Fan.

memories of a miner

the vigilante band

tech's mostly-alumni band still kickin' and pickin' after all these years

by valerie kimble

They say you can't go home again, but for 37 years now, members of The Vigilante Band have been doing just that.

The Vigilantes, a merry band of 10 musicians and a sound guy, returned to the scene of the crime – New Mexico Tech and Socorro – for the 91st annual New Mexico Tech 49ers Celebration October

16 to 18, and their annual reunion gig at the Capital Bar all three nights.

Roll call, lads:

- Denby Auble, acoustic guitar, vocals; and, every once in a while, pedal steel and bass;
- Jeff Baseheart, drums;
- Bradley Billings, percussion;
- Bill Giebitz, guitars and vocals;
- Randy Hanson, mandolin and vocals;
- Barry Hembree, fiddle, mandolin and

vocals;

- Jeff Hatchell (the erstwhile Booty King) accordion and keyboard;
- Bruce Mitchell, fivestring banjo, pedal steel and vocals;
- Borden Putnam, vocals, harmonica, washboard, secret egg, claves, and occasional mandolin;
- Dave Thomas, bass, vocals, guitar, and mandolin;
- *Shaun Wilson*, "the sound guy".

For younger alumni, and those who have lived under rocks or behind closed doors for decades (not unusual for some Techies), The Vigilante Band is to New Mexico Tech's 49ers celebration what green chile is to burgers: *They're better together*.

Oh, the boys are greyer now. Some have grandkids, too. Members of the "drinking band with a bluegrass problem" still are living south of 70 – in years, that is – and, for the most part, those years have been good ones – some



The Vigilante Band, circa 1990



Dave Thomas

broken unions along the way, new partnerships, successful businesses, births and deaths and a whole lot in between.

The roads taken – and the roads abandoned along the way – could not have been predicted back in the mid-1970s when "the lads" were getting together for jam sessions, the kind heavily influenced by cheap beer and herbal enhancement. Times were good.

And they still are.
So ... how does it all come together for 11 individuals scattered across the United States and Canada – and one band member in London? To find the answer to this and other mostly relevant questions, *Gold Pan* passed the mic to

Dave Thomas.

"It starts with emails,"
Thomas said, with one
or another band member
raising the notion of not
practicing, along with
suggested recordings for
the song list, generally a
mix of fan favorites and a
few new tunes. "In the old
days, we'd send CDs out
with the songs we had to
learn," he said. "Now, we
just use the Cloud."

Tech's 49ers is actually one of two events The Vigilante Band plays for each year; the other is at Los Ojos Bar in Jemez Springs, where the band has played for every 4th of July for the past 15 years or so. As keeper of the sound equipment, Putnam picks Wilson up for the



Shaun Wilson, "the sound guy"

drive down from northern California to New Mexico, towing a trailer with speakers, rack kits, amplifiers, and assorted technical input/output accessories — everything a touring band needs. "It's a lot of work, but it gives Borden a chance to play with his toys," Thomas said.



Jeff Baseheart

Meanwhile, Baseheart brings his own drum set. *Trivia piece:* "There's no room for the drums at Los Ojos," Thomas said, "so we only use them for 49ers." Okay, they *try* to practice before taking the stage at either venue; but this year at Los Ojos, there just wasn't time, and the band went on cold after tuning

up. For 49ers, the band arrives in Socorro on the Wednesday of 49ers week, giving them a day to get settled and practice.

"We also try to learn new songs," Thomas continued. "If we nail them at practice, we might play them for the gig. But, it might take two years until we feel like we've mastered it."

New tunes? "Maybe some Tom Petty stuff, or songs from some obscure bands no one has ever heard of," he replies.

Here is a good place to remind Gold Pan readers that while music, and getting together twice a year for fun and frolic, is all good stuff, most of the band members have professional careers, in part due to the quality education they received at Tech.

Thomas is viewed by his mates as the most exceptional band member. He won the Brown Medal in 1979, and holds a number of patents relating to optics, including a non-reversing, saddle-shaped mirror. Thomas and wife

Pam lived in Albuquerque and Peralta for many years, and only recently moved outright to Socorro, where Dave has worked as a staff scientist with Tech's IRIS-PASSCAL Instrument Center for the past five years. Previously, he had carpooled from Peralta to the Tech campus, and generally gets around town on a bicycle.

Thomas also teaches a class on science and pseudoscience through the Psychology Department which draws some 50 students each semester. The class, which dovetails nicely with his abiding interest in extraterrestrial life forms, focuses on the question, "What makes science work?" and challenges students thinking: "This fuddy-duddy wouldn't know a UFO if it landed on his head."

The scientist is active in New Mexicans for Science and Reason, also serving as its webmaster; and pens a column, "The Socorro Stumper," which appears weekly in Socorro's *El Defensor Chieftain*. Puzzlesolvers then can try to decode "a secret message"

from Stumper clues. And an announcement for current Tech students: "The 'New Adventures of Ernie Electron' will be returning to *Pay Dirt*," Thomas said. In the new series, Ernie will try to break free from his, um, *bonds*, to start his new adventures.

He and Pam bear the distinction of being married the longest of any other band member – 32 years – to the same spouse, that is. The physicist has no problem remembering his anniversary date, Feb. 14, 1981. "I remember it clearly," he said. "It's our 100,000th anniversary in binary."



Pam and Joanna DeBrine, patroness of the arts

Denby Auble has successfully bridged his vocation with his avocation, he told *Gold*

Pan from his Houston home. "Many irons in the fire, including my main day job as COO of Geotrace, an international reservoir description company serving the oil and gas industry; and, until very recently, a



Denby Auble

founder and member of the Board of Directors of NCS Subsea, an international hydrographic survey company that was purchased by OYO America in April. "The fun and passion happen with Blue Corn Music, the record label I founded in 1999 that focuses on Americana and Roots music. Our high points include two Grammy nominations for our artist Ruthie Foster for her last two recordings. Working with so many talented musicians, producers, and industry

professionals keeps the creative fires burning, and when I get to play with my lifelong buds, it's a reminder of where it all started," Auble said.

Brad Billings is the strong but mostly silent percussionist who joined the musical lineup in the 1990s. Married with a son, Billings lives in Albuquerque and has had a varied career, as befits the man of many talents. He has successfully combined degrees in geology and nursing, including taking the reins of the geoscience engineering firm started by his father.

These days, he's working more than 40 hours a week with the chronic and seriously mentally ill, even as he is studying for a master's in nursing to become a mental health



Brad Billings



The Vigilantes performing at the Capitol Bar

nurse practitioner.

"I continue to write songs," Billings said. "Married, in love with my wife (Rosemary)." Joining his band mates on stage continues to bring him joy.

"Playing with these guys for so many years, and it still remains the highlight of my year," he said. "Not just the playing, but the being with. ... Nobody I know that does *not* know us can believe the history and that it continues," Billings said.

Brad moved from Louisiana to Socorro for his senior year of high school, in 1970. "Being in Socorro is not home anymore, but it sure feels that way when myself and the boys in the band are in town," he said.

Randy Hanson is central to the history of the band, and was pleased to give Gold Pan an update on his life. "As one of the founding members of The Vigilante Band, it brings back fond memories to recall our many musical

adventures together," he said.

"I took a hiatus from the band for a few years, but have enjoyed being back where I belong with this talented group of musicians. Like many of my over-achieving band mates, I have a day job as a research hydrologist with the U.S.G.S. that takes me all over the world helping people with water, especially in Latin America.

"Also, like my TVB mates,

I have played in other bands that have allowed me to explore bluegrass, alternative, Americana, jazz, etc. Most recently I have also founded



Randy Hanson

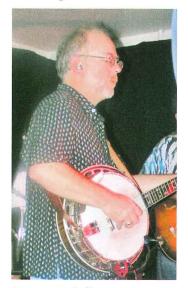
memories of a miner The Vigilante Band

an original bluegrass-Americana band in San Diego (where I live and raised my family)".

Hanson said the new music project is called MohaviSoul. "We just finished our second CD of original songs written by myself and Mark Miller, and joined by upand-coming fiddler John Mailander that will be released this fall through Mannequin Vanity Records," Hanson said.

"While the TVB has reached cult status, we continue to experiment and try new music that expands our repertoire and keeps our life-long fans coming back for more – and capturing a new generation of TVB followers and music lovers. I'm proud to play mandolin with these lads and hope the road goes on forever!" he said.

"I am the only sole survivor of The Vigilante Band that still lives in Austin," said *Bruce* "Wolfie"Mitchell. "Pickin' and grinnin' with the Boxcar Preachers, enjoying learning the pedal steel these days, swimming at Barton Lake." He is a graduate of the



Bruce Mitchell

University of Texas at Austin with a bachelor's in radio, television and film, and ended up spending 29 years with his alma mater. "My last gig at UT was project manager at Engineering. After leaving UT, I went over to Austin Community College where I'm instructional resource technology manager for the district."

Mitchell produced "travelin' Texas troubadour and tunesmith" Danny Santos's new album at his "humble recording studio, Mitchell Digital," he noted. The album hit number-16 on the Euro Americana charts. He also is working on his fourth children's musical with his wife, Susanna Doulas. Although not one of the "official" songwriters for the band, he occasionally performs "Southland," a song about childhood friendships written by Susanna.

"I don't do it justice vocally, but it is a fine tune and the band carries it well," he said. Mitchell also sings lead on another original, "Magdalena," which he wrote on his first visit to play with the band in Socorro in 2001. "It's a pleasure to be backed by the Vigilante chorus," Mitchell said. "When the Vigilantes sing in harmony, they can lift the stage."

His most memorable gig was his first with the band – in Jemez for the 2001 July 4th weekend, "That's when I met most of the band on stage, and for the first time I played Ed Brandt's tune, 'Short Song.' T'was then I knew

I wanted to play with these guys."

Borden Putnam is part of the adhesive that keeps The Vigilante Band boat afloat. So what's he up to these days?

"My update involves tempting fate by quasiretiring from a day-type job and doing consulting," Putnam said. "I still work for hedge funds, but am no longer required to be anywhere I don't want to go. It's different, but now my time is pretty



Borden Putnam

consumed by being a front of house (FOH) engineer.

"Most don't realize the effort the Vigilantes put in to making it sound good

memories of a miner The Vigilante Band

- for the fans and for us," he continued. "November marks my 40th anniversary of doing FOH, but with that comes a lot of systems engineering. And that started largely with The Vigilante Band - we'd try to play every weekend back in the late '7.0's, renting gear from Albuquerque and trying to hook it all up correctly. Lots of that rented gear didn't work, and we got good at improvising. That's why our set-up now looks so fancy," Putnam

continued.

And the beat goes on with a number of Bay Area bands – including several with close links to the Grateful Dead.

"I just entered my eighth year touring as FOH with Melvin Seals & the Jerry Garcia Band (JGB)," Putnam continued, referring to the American rock/blues band led by Seals. When Garcia died in 1995, and the Dead went on hiatus, Seals took

charge. "Melvin toured with Jerry Garcia for the last 15 years of his life in the Jerry Garcia Band," said Putnam.

This year also marks his eighth with Stu Allen, another ex-member of JGB; and for the past couple of years with Fall Risk, fronted by Jeff Pehrson of Furthur.

"This past August, I had a lucky call to cover five days of rehearsal and four shows with Phil Lesh & Friends

at Terrapin Crossroads," Putnam said. "Phil liked the way production went, and wants me back there's an outside chance it will happen. October also marks my seventh year working the Hardly Strictly Bluegrass Festival in Golden Gate Park free concerts from six stages over three days. It's massive, estimated at over 300,000 attending over the weekend. I've worked Rooster Stage, first as patch-guy/stage hand, and then four years as FOH/



The Vigilante Band atop M-Mountain

system engineer."

"So, what's cool about the Vigilante Band?" asks the tall man who plays a mean harmonica. "Mostly that we still do it, and folks like us doing it!"

It was Dave Thomas who updated *Gold Pan* on the four remaining members of the band.

Drummer Jeff Baseheart still lives in the Bay Area, where he plays with a number of bands. Baseheart is credited with giving the band a more danceable sound. His work career is eclectic: He has worked for the Golden Gate Transit Authority, the mutual fund industry and others in his pursuit of quitting every possible job and career choice possible.

Bill "Blind Billy" Giebitz is sole proprietor of Guitar Services of Austin, a high-end custom guitar and vintage instrument restoration business now based in Socorro. He has been a luthier for over 30 years, and has worked at Collings Guitars and Strait Music in Austin. A relative



Bill "Blind Billy" Giebitz
newlywed, Bill and wife
Jeanne Dixon are regulars
in the Socorro music
scene, and under the name
"Unplug the Couch," plays
with popular musicians
such as Peter Chase of

Albuquerque.

Jeff Hatchell, otherwise known as the "Booty King," is still working for Los Alamos National Laboratories "and making things glow," Thomas said. If any readers want to know the reason behind Hatchell's moniker, check out The Vigilante Band webpage – or use your imagination.

The band member travelling the furthest for 49ers weekend is *Barry Hembree*, now retired and living in London. Thomas said, "After we get paid and pay our bar tab, Barry gets what's left for coming the furthest – generally about \$10 or so."



Barry Hembree

Thomas concedes that his Tech alumni band mates have never made a living from their music, "but we got great educations and have had great careers. Things have worked out really well, and we have a blast every year".



The "Booty King" on accordion

SIDEBAR: Here's How It All Began . . .

in the beginning....

The Vigilante Band



The Vigilante Band circa 1979: Clockwise from left, Bo, Barry, DT, Bill, Randy, Denby and Steve. Photo copyright Steve Williams.

It began during August
1975 one sunny afternoon
in Socorro, when a group
of otherwise unassociated
musicians gathered at
Randy Hanson's house on
6th Street, and played a few
songs over-and-over-andover, shirts off, before the sun
went down and the sweathouse started.

Those words appear on the band's official website, conjuring up images of long hair, sideburns and a fledgling bluegrass sound. And that's how things might have remained, were it not for a fellow named Ed Brandt, who coaxed the band into shape by bringing a sense of order to the sessions.

Brandt helped tame the musicians into a cohesive unit – well, more or less. Part of the Vigilantes' charm has been a kind of nonchalance which plays well against the music, a sweet tonic of bluegrass, country rock and backyard bayou. The band debuted at the "Ore House," a basement hangout beneath Driscoll Hall, and later played the Driscoll living room.

But many consider October 20, 1978 as their "big break," when the band performed at the former Roadrunner Lounge with a sound system, for the very first time.

Two months later, Brandt, the band's leader and banjo player, at age 28 succumbed to the congenital heart and lung defects that had troubled him all his life.
Band members drifted, while the Roadrunner marquee bearing "Dance Sat – Vigilante Band" remained untouched for nearly a year.



Ed Brandt

Enter 1969 Tech alumnus
Charles Mandeville, who at
the time was refurbishing the
Valverde Hotel. Mandeville
invited the band to use
an empty dining room as
practice headquarters, and
helped the band break into
the Albuquerque/Santa Fe
music scene; soon, Auble
and Hembree joined the
band, Mandeville became



Charles Mandeville

de facto manager and sound engineer, and Putnam emerged as front man.

During "the touring years," a host of folks joined the fellows onstage as the band took on various permutations. Many will recognize the names of other Tech alumni and friends of the band: Leanna Grossman, John Sorrell, Smokey Smerken, Guido Tenaglia, Bill Kamps, Jenny Branch, Amy Blackburn, Bob Will, Steve "Phlatbed" Senn, Dr. Dale Fanney and DT's dad, David A. Thomas.

Two gentlemen who moved to town and by gosh never left, on rare occasions are often seen attending The Vigilante Band gigs – the everlastin' Bob Eveleth, who as a student snagged a local beauty, and that dancing fiddle man himself, John "Merfin" Murfin. How many readers remember the Toe Jam Grass Band with Auble, Hembree and Putnam; or Uncle Dave's Band, with Thomas, Putnam and any other Toe Jam members who could be rounded up onstage?



bill macey

a tech success story

by Thom Guengerich

"I was always very, very interested in helping the school as best I could in any way I could – because I had a deep regard for the education they had given to me."

Those are the words of William B. "Bill" Macey, perhaps New Mexico Tech's most recognizable alumnus - thanks to his major donations that helped complete construction of the Macey Conference Center in the early 1980s and, more recently, the Macey Family Children's Center. He is also the namesake for the Macey Scholars Program, which he started in the 1980s and continues to support.

Bill Macey completed his bachelor's in petroleum engineering in 1942 – one of only 13 members of his freshman class of 135 to finish in four years. After a stint in the U.S. Air Force during World War II, he embarked on a successful career with small and mediumsized oil companies in New Mexico and Texas. In 1970, he started an

oil-and-gas exploration company based in Denver that proved to be very successful.

The Macey Mershon Oil Co. drilled 142 wells without ever drilling a dry hole.

"We started out very modestly," Macey said during a recent interview at his home in Albuquerque. "We looked at a map and found where the gas field was going to go."

Macey and his business partner, Paul Mershon, discovered that a California company had a good deal of mineral rights leases, but had stopped drilling. Mershon met with the company and negotiated a deal to drill on that company's leases and give the lease owners a small piece of the royalties. From that start, Macey would go on to leave a lasting and important legacy at New Mexico Tech.

Like many School of Miners of his era, Bill Macey came from humble beginnings. He was born in Buffalo, N.Y., to Richard Charles "Charlie" and Doris Macey. Charlie Macey immigrated to the United States in 1907, thirteen years before Bill was born. Charlie worked as a construction laborer



Bill Macey and his sister

until he suffered a nasty accident on the job, breaking both of his legs. After recuperating, Charlie became a building contractor during World War I. By the time Bill was born, Charlie was a well-established contractor in Buffalo. Young Bill was an above-average student in grammar school, but he got himself into trouble.

"I needed disciplinary action a few times," Bill said with a chuckle. "The biggest single problem was that I had so much idle time. I'd finish my third grade work first and then I couldn't sit still."

So, Bill's teachers decided that he would skip fourth grade and go directly to fifth grade. He finished grammar school at the age of 13 – a year before everyone else.

"I went to high school at a school of 3,500 students," Bill said.
"And I got lost in the total process. I was a year younger and I had a difficult time the first year or two. I couldn't understand why I needed to take Latin when I wanted to be an engineer. A kid of 13 doesn't understand those things."



Bill Macey

At that time, all high school students in New York took a standardized

bill macey a tech success story

test on the same day of the year. As a senior, Bill fell ill on the day of the exam and couldn't take it.



Bill Macey in his youth

"That was actually good for me because I was a year ahead of myself," Bill said. "That helped me when I went to Tech, because I had a difficult time making a decision on college."

Bill had wanted to matriculate at Cornell, where he could have played baseball. And Cornell offered him a scholarship.

"For some reason, I didn't like some of the curriculum at Cornell, but I did like the catalog that New Mexico School of Mines issued. One thing I really liked about it – and the main reason I went to Tech – is that all the freshmen took all the same courses."

During that era, School of Mines students would not select a major until their junior year.

"I liked that because it gave me more time to learn about the industries," he said.

When Bill was growing up, Charlie Macey – or sometimes Doris – would go to the bank every Friday and withdraw the cash they needed for the week. Charlie would count out payroll for his employees and give Doris money for groceries and other household needs for the week and "a little bit extra."

"My mother would always put that 'little bit extra' in a coffee tin above the sink," Bill said. "That was my college money. I don't know how she saved enough, but she did. If I had that coffee can right now, I'd put it on my mantle."

So, in 1938, Bill Macey set off across the country to Socorro, New Mexico. For his freshman year, Bill spent \$500. That included everything — tuition, books, roomand-board and living expenses.

He – along with a number of other freshmen – got off the train in Belen and caught the bus to Socorro. A group of sophomores met the freshmen at the bus station, which was then on the Plaza where the current post office sits.

"The sophomores latched onto us, took us to school and got us registered," Bill said. "No sooner than we

got to see our rooms, they picked us up and threw us in the swimming pool. After drying off, they took us downtown and we got involved in a local voting deal – where we were told who to vote for. That's 100 percent true!" he said with emphasis. "That night, they took us out – five or six of us - to what is nowEscondida, took us out on a side road, told us about rattlesnakes – and dumped us out. We made it back to the highway and hitched a ride to town. That was the extent of the hazing."

He remembers his first trek up the mountain in the fall of 1938. Students carried lime and water



Bill Macey (third from left) with some of his classmates

to the 'M' to repaint it. By that time, they had been in class together six weeks and already formed friendships.

The first year at School of Mines was a bloodbath – figuratively speaking, Bill said.

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Bill Macey's report card, 1941

"I had been a very strong student in math in high school and I quickly absorbed all the advanced math courses as a freshman," he said. "There were 135 students in that freshman class. On St. Patty's Day, which at that time the freshmen and sophomores used to have a tussle over the Blarney Stone, we counted the freshmen and

there were only 33 of us left. The mortality rate was terrific."

Macey said a variety of factors lead to the high drop-out rate. First, the country was emerging from the Great Depression and many students had financial hardships. Another factor was the difficulty of the curriculum.

"A lot of them had poor high school training. Not that they were dumb, but they weren't exposed to math and science enough," he said. "The students from New Mexico were at a big disadvantage because they didn't have the high school training — not even remotely."

Those who persevered became a tight-knit group. As a freshman, Macey lived on the first floor of Driscoll Hall. Out of the 10 students in his floor, five of them graduated in four years.

"We had an intense companionship to help each other," Macey said. By the end of his freshman year, Bill had already decided to pursue petroleum engineering. Throughout his college years, Bill would return to Buffalo for the summers. There, he worked for the New York State Highway Department and spent one summer working at a Canadian fishing resort north of Toronto.

He especially enjoyed the highway work, partly because he learned a lot about surveying and could work outside, and partly because the elder workers were so cooperative with the summer help.

"I didn't have any business experience, except what I encountered with my father, who had to find clients," he said. "I became interested in the building of houses, but I didn't want to get in as second man in the firm. So, I really set myself up to take petroleum."

His career would have to wait for the war, though. The United States joined World War II in December 1941, but Bill and his classmates were able to finish their degrees before joining the military service. Bill signed up in March 1942 and returned home after graduation to await his call. He got that call on August 19, 1942. Upon signing up, he was sent to Chanute Field in Illinois for basic training. In January, 1943, he earned his commission as an engineering officer, Second Lieutenant Bill Macey, and was sent to Salt Lake City on assignment to a bombing group.



Lt. Bill Macey

He was soon transferred to El Paso, where he would meet some of the pilots for whom he would supervise aircraft maintenance and engineering. One person in particular sticks out in his mind.

"I walked into the squadron office and introduced myself, 'Second Lt. Bill Macey, reporting for duty.' The sergeant asked me, 'Are you Lt. Garcia?" Bill said. "And I started laughing. He said, 'We're looking for Lt. Garcia.' I explained I was an engineering officer and he quickly realized his mistake. I found out later that Joe Garcia was a pilot who was flying from Washington State to El Paso, but the crew had 'mechanical difficulty' and they landed in Las Vegas instead."

Bill describes his future friend and comrade Joe Garcia as a "very tall, good-looking guy – a great pilot and great guy." But Joe Garcia also had a knack for getting in trouble.

Macey – and Garcia and their crews – were assigned to Polebrook Airbase north of London for about two years –



Bill Macey with his unit in England (standing, top left)

until the war in Europe ended in May 1945. Bill's squadron in the 351st group maintained all the aircraft based at Polebrook.

"Joe Garcia was the 'tail-end Charlie' for every mission – that's the most dangerous spot in the squadron – because he was always in disciplinary trouble. He was wild, but a great guy." Bill leaned forward

to make his next point: "Joe and his crew ended up at 25 missions and they went home. They were the only ones who made it through the war." Bill supervised 110 people in his engineering unit, divided into 12 crews. They maintained all the aircraft for the U.S. Air Force at that base.

"I worked with a great group of fellows and most of their work was under bad conditions early in the morning in darkness. And there were no portable power plants. It was tough work — and

the weather.
They worked
uncovered – in
England," Bill
said. "It was
very difficult
personally
to become
acquainted with
the flight crews

that went on missions and either didn't come back or got back all shot up and injured. Of the 12 original flight crews, only Joe Garcia's crew made it through 25 missions — the rest were killed or prisoners of war."

Bill and Joe kept in touch over the years. Only after leaving the service in 1945 did Bill come to find out that Joe Garcia hailed from Magdalena, N.M., just up the road from Socorro. Garcia eventually went to dental school in Kansas City and became a dentist in Albuquerque.

"Those are the kinds of lasting friends you can make in England at an air base 90 miles north of London," he said.

Over the next few months, after returning stateside in May 1945, Bill visited his parents in Buffalo, shipped off to an airbase in Sioux Falls, S.D., then on to an airbase in Deming, N.M. He was only there a few days when he was discharged from the Army Air Corps as a captain.

That fall, Bill married his college girlfriend, Jean Mullins, and they moved to New Orleans where Bill took a job in the oil fields, working for a company that would become Chevron. The Maceys didn't exactly enjoy their time in Louisiana, however. The weather, the humidity and the rats were just too much for them. They returned to New Mexico before the end of 1945.

For a short time, Bill abandoned petroleum and geology to work for the New Mexico State Highway Department in Santa Fe. By April 1946,

the New Mexico State Geologist Dick Spurrier – one year in front of Bill at Tech – hired Bill as the district engineer to work with the N.M. Oil Commission in Artesia.

Bill and Jean stayed in Artesia until 1950, when he went back to private industry as the assistant superintendent for American Republic Corp. in Houston. They stayed in Artesia and Bill was in charge of the West Texas Division and New Mexico. Bill did the calculations — he was driving 50,000 miles a year. He'd make a five-day circuit to visit the company's rigs near Fort

Worth and San Angelo, Texas, then back to Artesia.

"That was very difficult work, in terms of hours worked, but it was a great learning experience," Bill said. "I quickly learned that the oil industry is 24-hours-a-day/sevendays-a-week. It never stops. It's a very taxing industry if you're in the field and it's the same way today. But I loved it and I still do!"

American Republic Corp. sold out to Sinclair in 1952 and Bill decided to leave the company. The couple returned to Santa Fe, and Bill became the

chief engineer for the N.M. Oil Commission. Then, in 1954, Gov. Edwin L. Mechem appointed Bill Macey as the State Geologist, and he also ran the N.M. Oil Commission. He continued in that capacity under the next administration, headed up by Gov. John Simms, but soon left civil service to rejoin private industry.

Bill worked for Western Development Co., a small oil company getting started in Santa Fe and based in New York. He was vice president of oil and gas production for the diversified company



Bill Macey (seated, second from right) during his days in Santa Fe

that also had interests in uranium mining and natural gas production. He called that job another growing experience.

"I learned a lot," he said.
"I went to New York once every two months and I enjoyed the corporate work, so to speak."

The company had recently purchased properties in West Texas. As Bill reviewed the purchase documents, he realized that the paperwork lacked the appropriate number of details about the location of wells and disposition of ownership.

"I talked to the company president and the attorney. Two hours later, the attorney agreed with me," he said. "At that point, I was learning about oil and gas titles and things like that."

That experience helped Bill build the confidence to assess oil and gas leases and recommend investments. In 1959 (or so, as he recalls), he convinced the company to purchase a property near Artesia for \$1.5 million. The Maceys then moved back to Artesia, so Bill could run that oil field in partnership with the Yates family. Around the same time, the company president got crossways with the board of directors and was fired; and Bill was named interim president.



"We had bought more properties in the Artesia area and Lea County," Bill said. "They turned out to be very, very lucrative – in deeper zones. We got involved in one of the best oil fields in New Mexico. After two months as acting president, at a board meeting in Artesia, I took them out and showed them the property and

they asked if I'd become president and I agreed."

Within a few months, the company moved its headquarters from Santa Fe to Denver and the Maceys were on the move again. Bill's confidence in his abilities to evaluate an oil field grew. At a board meeting with Western during the early days of development, a board member asked how many wells they could drill on their property.

"I told them we are going to have an interest in 49 wells," Bill said. "I know the limits of the field and the acreage and I know what the contours of the field are. They said, 'Not 50?' And I said, 'No. Only 49 wells.' And I was 100 percent correct. It's not that great of a task, but I didn't want to pull the wool over their eyes by exaggerating by even one well."

Bill stayed with the company for about six years until it sold in 1966 "much to my ... well, not disgust," Bill said. "I just felt like they were making

a mistake. And they were, from a financial standpoint."



Again, as he did everywhere he worked, Bill met new colleagues and made new friends. But it was time to move on again. Bill took a job with Husky Oil Co., living in Dallas for a year, then moving to Cody, Wyo., in 1967. There, he was in charge of "a whole smorgasbord of companies – a pipeline, real estate, large ranch properties, oil and gas, and even a golf course. They had everything and I ran it all. It was extremely interesting, but not the nuts and bolts of the oil industry that I had grown up with – or matured in."

While in Cody, Bill met a person who would turn out to be an important part of his future company. Jim Brown was a jack-of-all-trades who had both managerial experience and computer knowledge.

Finally, in 1970, Bill and Jean moved to Denver to try to put together his own company, all while he continued to help run Husky Oil ventures in Denver. Bill took Jim Brown along with him to serve as company general manager. Bill also brought in a business partner, Paul Mershon, who had been a geologist in Artesia. They hired a company engineer and a good staff – and the rest is history.

Around 1980, Bill was doing a lot of traveling.

He owned two planes; he and Jean lived in Tucson and had a condo in Denver. Bill was 60, and he had entrusted most of the day-to-day operations of the company to his right-hand man, Jim Brown. "Jim was ramrodding the deals and the office staff was very efficient."

Bill remembers getting a call from Bill Bradley, the alumni affairs director at New Mexico Tech.

"He told me they
were building a new
conference center and had
started construction and
asked me if I would come
see it," Bill recalls. "My
wife at the time was very
helpful in talking to Bill
Bradley and setting up the



Jean (Mullins) and Bill Macey stages of what we were going to do."

Bill and Jean first established the Macey Scholars Program, which has since then provided \$5,000 scholarships to four or five seniors every year. Then, around 1983, the couple donated a large portion of the construction funds required to finish the building now known as the Macey Conference Center.

"I wanted to see something that wasn't tied to mining or oil and gas or technology," he said. "And the building has served a very good purpose."

Meanwhile, he continued to take part in the Macey Mershon Co. Bill remembers conducting a staff meeting in 1995 – at the age of 75 – when he realized that he was having trouble hearing people from across the room.

"I realized I was losing my hearing – and it had gradually declined to nearly total deafness," he said.

He slowly removed himself from the company and retired, although he still holds



Macey Conference Center, established by Bill and Jean Macey in 1983

bill macey a tech success story

an interest in some properties in West Texas, through his family's foundation. He and Jean pursued their love of traveling – until Jean was diagnosed with Alzheimer's in 2000.

Jean's illness "brought everything in the family to a halt," Bill said. Jean finally succumbed to her illness in 2006. A couple of years later, Bill married Cheryl Pulaski, who he had met through his affiliation with New Mexico Tech.

And Bill and Cheryl took up one of their favorite pastimes – traveling the world, especially to Europe and the south Pacific. Bill said he's



The Macey Family Children's Center, established by Bill and Cheryl Macey in 2012

done with European trips because they take too much energy out of him – although, he hopes to continue his Christmas trips to Tahiti.

He's also been advised to spend less time at high altitudes – in other words, move out of Albuquerque, where the Maceys' house sits at 6,200 feet.

"My doctor is right.

When I'm at sea level, I feel better and rest better," Bill said. "So we bought a condo on Vancouver Island, British Columbia."

Bill and Cheryl will get settled into their new home in the coming months.

"We were very interested in repaying Tech for the wonderful education they gave me," he said. "I'm not through with contributions, but I'm throttling down."

He's especially proud of the donation that he and Cheryl made to the Macey Family Children's Center, which was completed in 2012.

"The ultimate value of the institution will be shown

by these kindergartners as they come out. They'll go on to be great Techies. I'm very proud of that."

For all his successes, Bill Macey takes much less credit than he deserves. He consistently talks about the great people whom he worked with, the great friends he has made and the wonderful colleagues who have contributed to his success. Further, he consistently accentuates how much he has learned along the road - not just at Tech, but from his various business ventures.

"I've been very fortunate to be associated with wonderful people throughout my career," he said. "I couldn't have done it alone."



Bill Macey and Tech President Dr. Dan López



Cheryl (Pulaski) and Bill Macey

calendar

November

19-24 Festival of the Cranes, Bosque Del Apache National Wildlife Refuge



22-24 Festival of the Cranes Arts & Crafts Fair, Garcia Opera House

December

- **5** Earth Science Seminar, MSEC 101
- 7 1st Saturday Star Party at Etscorn Observatory
- 7 Luminarias on the Plaza Art Stroll & Christmas Electric Light Parade, California St. to Plaza



- **13** NDI-NM "Eureka!" Socorro County Youth Dancing, Macey Center
- **21** Merry-Achi Christmas Produced by Les Torres, Macey Center

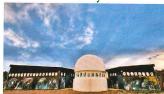
January

- 4 1st Saturday VLA Tours
- 4 1st Saturday Guided Night Sky Telescope viewing at Etscorn Observatory
- **27** PAS String Quartets, Macey Center
- **31** PAS Cirque Montage, Macey Center



February

- 1 1st Saturday VLA Tours
- **1** 1st Saturday Guided Night Sky Telescope viewing at Etscorn Observatory



Etscorn Observatory. Photo by M. Colleen Gino

- **12** PAS The Fantasticks, Macey Center
- **28** 28th Annual NM Science Olympiad
- **28** PAS Carl Nunez, Macey Center

March

- 1 1st Saturday VLA Tours
- 1 1st Saturday Guided Night Sky Telescope viewing at Etscorn Observatory
- **7** PAS Tap: The Show, Macey Center
- **14** Pi Day: Eat a piece of pie to celebrate
- **28** PAS Guy Forsyth Trio, Macey Center
- **31** PAS Piano Quartet, Macey Center

April

4 62nd Annual NM
Science & Engineering
Fair, NMT
Gymnasium

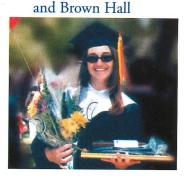


- **4** PAS Mark Nizer Comedy, Macey Center
- **5** Trinity Site Open
- 5 1st Saturday VLA Tours
- **5** First Saturday Guided Night Sky Telescope viewing at Etscorn Observatory

11 PAS – Taikoza-Taiko Drumming, Macey Center

May

- 1 PAS Santa Fe Opera on Tour, Macey Center
- **3** Cinco De Mayo Celebration
- **3** 1st Saturday VLA Tours
- **3** First Saturday Guided Night Sky Telescope viewing at Etscorn Observatory
- 10 NMT Commencement, lawn between Skeen Library



June

- **2** Socorro Open Golf Tournament, NMT Golf Course
- 7 1st Saturday VLA Tours



7 First Saturday Guided Night Sky Telescope viewing at Etscorn



The New Mexico Tech 125th Anniversary license plate is available for New Mexico residents at your local DMV office!

Show your school pride. Get yours today!

WANTED!

We're looking for these class of 1964 former students so we can invite them to their 50th Reunion! If you have any information regarding their whereabouts, contact Theresa Kappel. (tkappel@admin.nmt.edu, or 575.835.6209

Francis Attson

Nathan Columbus

Lawrence R. Eaton

Raymond Jojola

Dorothy Lacey

Glenn S. Leach

Richard F. Lease

John H. MacKenzie

Johnny P. Mann

Richard S. Shay

Glenn E. Smith

Barbara Waggoner

Alton L. Warren

Peter L. Lee

Alvin K. Yee

construction notes

steve torres residence hall



Steve Torres, NMT Regent Deborah Peacock

The Steve S. Torres Student Residence Hall Dedication took place on Thursday September 26, 2013, on the north patio. Dr. Lopez, Richard Carpenter and Steve Torres addressed the audience at the dedication.

Steve S. Torres was a regent of New Mexico Tech for 30 years from 1966-1996. There were over 120 guests at the dedication, including many of Steve Torres's family, faculty and staff of NMT and Socorro residents. Students and Residential Life took the guests on tours of the 150-bed, three-story, dorm.



Dr. Daniel H. López, Steve Torres, Mayor Ravi Bhasker



Friends, family and well-wishers at the Torres dedication



NMT Regent Richard Carpenter

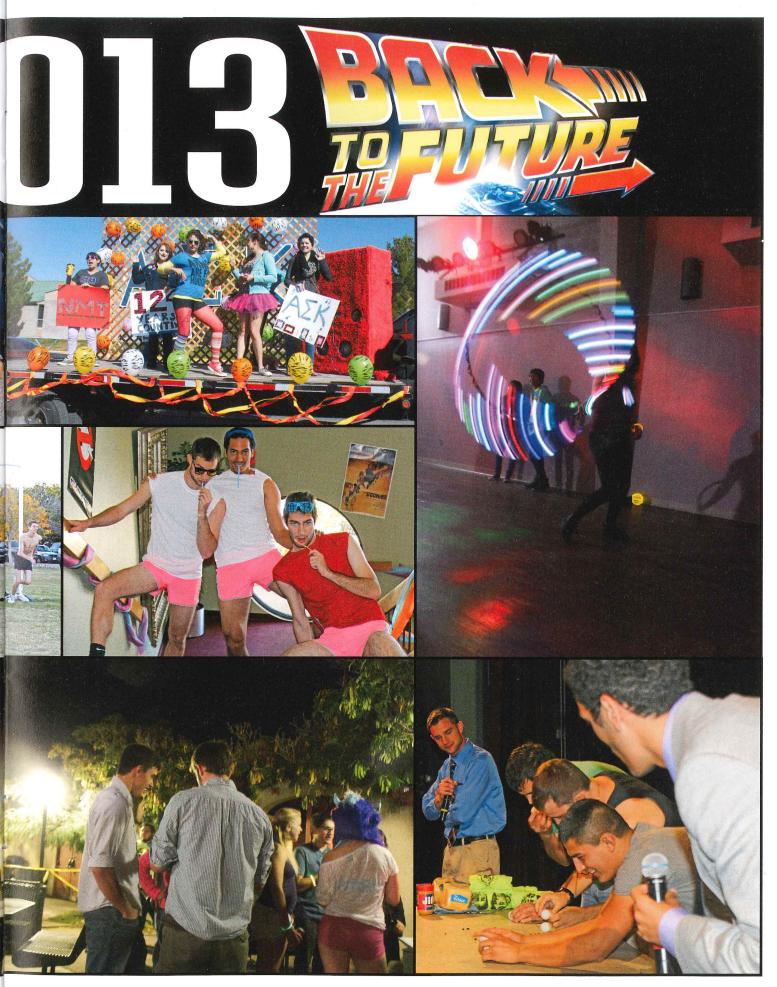
Give Us Your Best



Do you have an awesome photo of Tech, either from when you were here, or from a current event?
Send them in and we'll select some of the most interesting ones to put on our center postcards!

Show us what you've got!

e-mail your favorites to: esteinhoff@admin.nmt.edu



tales of three techies

from the class of 1962, revised edition

by Valerie Kimble Editor's Note: Gold Pan deeply regrets the avalanche of errors in the recap of the Class of 1962 Golden Reunion article published in the Spring 2013 issue and brought to our attention by Norman Banks. To set the record straight, Gold Pan invited the 10 alumni who attended the reunion dinner in May, 2012 to submit corrected biographies, and three responded including Lowell Boynton, who was inadvertently omitted from the original article. Gold Pan deeply regrets the errors.



Lowell Boynton
Lowell Boynton received
his degree in petroleum
engineering on June 1,
1962, and married Ann
Taylor of Socorro on June
2, 1962. The very next
day, the newlyweds left

for Lowell's new job with Texaco in west Texas.

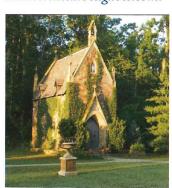
"For the next five years, we were bounced from one oil field town to another," he wrote. "One special memory was a town named 'No Trees' in Texas. Guess how this garden spot of America got such an appropriate name?

"It became increasingly obvious to me that Lowell Boynton, west Texas and the ways of a major oil company were a poor fit, so we made a change.

"Some of my classmates have moved to work in a strange and foreign land. Ann and I did something similar – we moved to Arkansas. My new company home was Arkansas Western Gas Co. based in Fayetteville. It was a more compatible, local natural gas utility company which had the distinction of drilling for its own supply.

"In July of 1994, I was appointed by the Governor (Jim Guy Tucker, who succeeded Bill Clinton) to the Arkansas Oil and Gas Commission, an agency regulating all state oil and gas activity. As a commissioner for the next 10 years, I learned when deciding contested docket issues that I had angered both sides, I could be reasonably sure I had been fair.

"I retired in 1999.
Fayetteville had been a nice place to work and raise a family. Ann and I have two daughters – fourth- and eighth-grade teachers – and three grandchildren.
We are all currently on the same property and have a small family-run business (a rather odd one for an ex-petroleum engineer). If interested, visit our website: www. stcatherinesatbellgable.com.

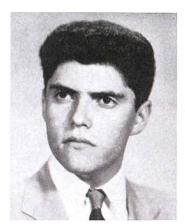


A few highlights:

• Became a registered professional engineer in the state of Arkansas, in

1971, by examination in the field of petroleum engineering

- Long-term member of two American Gas Association committees for annual AGA national publications, estimating northwest Arkansas remaining gas reserves, and estimating probable, possible and speculative undrilled gas reserve potential of northwest Arkansas
- Member Society of Professional Engineers (SPE) Twenty-Five=Year Club, having 25 or more years of continuous membership
- Retired in 1999 after 32 years as Director of Gas Supply for Arkansas Western Gas Company.



Joe Martinez
Joe Martinez was a senior
in the Mathematics
Department, under the

co-op program, when the Draft Board sent him a notice to appear for the draft exams in Albuquerque. Those were passed with a 1A rating, and Joe was told he would get a "greetings" notice any day. The Army would not grant Joe a deferment to finish the degree; so, walking across the hall, he consulted with the Air Force. The AF said, "No problem, pass the A.F. exams, and we will let you finish the degree, and then you will go to Officer's School."

And so he did. Martinez completed his degree in mathematics and then waited for the call from the U.S.A.F. Officer's Training School. In the meantime, he and fellow graduate Ken Allison, both from the Española area (Ken was waiting for the call to go to the Navy Ordnance Lab in Civil Service) passed the time with swimming and other activities. Joe also served as the best man at Ken's wedding.

Eventually Joe became a communications officer with the rank of captain,

flying in the Strategic Air Command's Airborne Command Post during the Cold War. Think of the Communications Officer Uhura in Star Trek – but without the short skirt uniform!

After the Air Force, Martinez joined an engineering think tank in Albuquerque in EMP research, and retired after 35 years. The firm had undergone several administrative changes from The Dikewood Corporation to Kaman Sciences, to ITT.

Joe has been married to Geraldine Martinez for 40+ years and they have three children. Their son, Michael, also is a Tech graduate. The couple has four grandchildren as well. Among Joe's favorite pastimes are music and community theatre, and he is particularly proud of having portrayed Galileo in Bertoldt Brecht's play of the same name. He also has performed Shakespeare and one-man shows of Albert Einstein.



Norman Banks

"After graduation and during that summer of 1962, I got married to NMIMT coed Helen Ramey, and worked on a NSF grant mapping geomorphological features along the Rio Grande Valley," Banks told Gold Pan. "Arriving at Scripps Institute of Oceanography (UC San Diego campus) in September, and fulfilling a goal of becoming a marine geologist, held since fifth grade, I found myself poorly prepared to compete with fellow graduate students from big schools like Berkeley, Cal Tech, Harvard, Yale, etc.

"It was a tough go the first three quarters, trying to learn graduate-level thermodynamics, organic chemistry and all the other subjects that I had had no opportunity to tackle at Tech. I thought that I had flunked out (two Cs), but the professors were impressed at my effort to take both the required and the catch-up courses.

"Then, we had our first of two field courses, and no one could map like a Techie. Some of the bigschool guys really could not use a Brunton or a hand lens, or translate rock formations onto a map and cross-section. That gave me the breathing room to catch up and move abreast of my fellow grads in all course work."

In time, Banks passed his orals for an MS in 1965 in Geochemistry/ Geology, and shifted his focus to base metal mines and sedimentary rocks in Colorado for his Ph.D., received in 1967.

"I had a job lined up to study porphyry copper deposits in Arizona in the USGS Base and Ferrous Metals Program working out of Menlo Park, California," Banks wrote. "Within a month,

tales of three techies from the class of 1962, revised edition

I was running the project, and soon after, I officially became project chief of the lion's share of the work with several other geologists and technicians working on the project.

"Not long afterward, Ms. Ramey and I parted company; and several years after that, I began seeing and eventually married (1973) a USGS geologist, Jane Buchanan, with whom I had two wonderful daughters (1974 and 1977), both now scientists in their own rights (marine biology and biology/entomology)."

As happened frequently in his USGS career, Banks was periodically shifted to a new project or farmed out to another agency due to budget crises in the government. As it happened, he was assessing the geothermal energy potential for South Korea and the U.S. DOE, when Mount St. Helens began to stir in March of 1980, and Banks found himself at the center of an historic event.

"That eruption changed volcanology as we knew it, not only in the USGS but across the U.S. and around the world," he said. "It was an exciting time, landing on the crater rim three days after the event and flying into the crater two days later to examine the source area of the 'blast' deposit. We rewrote textbooks and others did, too. It particularly changed



The members of the New Mexico Tech Class of 1962, and their spouses, had a chance to revisit their glorious youths at the Golden Reunion dinner held at Macey Center on the Tech campus honoring them on May 11, 2012.

my professional life. I had always been data-driven, and was known as the go-to-guy at eruptions because I tended to arrive at an eruption with many of the instruments that everybody had forgotten."

"Eruption forecasting is less certain than forecasting weather, and the danger period commonly lasts from months to years." Banks finished out his career mapping tertiary and quaternary volcanics in the Cascades between Mount Rainier and Mount St. Helens. After retiring in 1999, his home winemaking (started in 1968)

morphed into a second career.

"NMIMT, and the handson learning I got on the
Co-op Program, gave me
a broad education that
helped me to successfully
do graduate study in a
large school, and both
led to a long career in
science and diplomacy
much broader than I ever
envisioned as a poor kid
from western Pennsylvania.

"It didn't surprise me to hear similar stories from my fellow 1962 graduates at our Golden Anniversary Reunion, or to read of similar careers in every issue of the *Gold Pan*."



At 8:32 a.m. May 18, 1980, Mount St. Helens erupted. The north face collapsed in a massive rock debris avalanche. The eruption lasted 9 hours, but Mount St. Helens and the surrounding area were dramatically changed within moments.

fall career fair

pathway to their future

Student Affairs was pleased to welcome 101 recruiters from 46 companies and over 625 Tech students, faculty and staff to this year's Fall Career Fair!
Outgrowing the gymnasium and Fidel ballroom, the fair was housed at Macey Center for the first time occupying both the upper lobby and stage area.

Drawing in industry leaders, 23 percent of companies in attendance rank in the Fortune 500 and/or Global 500 including Chevron, ConcoPhillips, Intel, Honeywell, Occidental Petroleum, HollyFrontier, Freeport McMoRan, Ecolab, Mosaic, Peabody Energy and Honda.

In addition to the nationwide presence, nearly half of the companies in attendance have a presence in New Mexico, while a quarter of the organizations were governmental agencies. The fair also welcomed a number of notable new companies present: BendixKing by Honeywell, Bureau of Safety and Environmental



101 recruiters from 46 companies attend the fall Career Fair in September, 2013

Enforcement, JackRabbit Systems, PNM Resources, Tri-State Generation and Transmission, and the U.S. Department of State Diplomatic Security Division. Complimented by the graduate schools participating, Career Services was able to provide Tech students with a broad spectrum of opportunities for both the summer and postgraduation.

Leading up to the fair, Career Services hosted a number of workshops to help prepare students for professional networking and interviewing. These workshops covered important job-seeker topics, such as Resume and Cover Letter Writing, Preparing for the Fair, Lunchtime Flash Resume Review and Interviewing. The workshops have become a staple on campus. This year Career Services had the pleasure of hosting Tech's new Federal Compliance Manager, Theresa Hollis (formerly of Amazon), who facilitated the interviewing workshop around behavioral interviewing and responding using the STAR method.

Dressed to impress, many students took advantage of our Career Closet where men's and women's professional attire can be checked out for the fair or interviews. Career Services is also pleased to provide business card printing for current students to help them stand out from the rest.

Feedback from organizations at the fair

was overwhelmingly positive. 100 percent of recruiters that completed surveys said Tech students were prepared to answer questions and they would attend future career fairs in Socorro. One recruiter commented, "Students presented skills and experience in an impressive manner." Furthermore, 18 companies chose to interview Tech students around campus following the Career Fair.

Companies with available internships and employment opportunities are encouraged to contact Career Services at 575.835.5060 or at careerservices@admin.nmt.edu. Be sure to mark your calendars for the Spring Career Fair Thursday, scheduled for February 6, 2014, at the Macey Center.

Career Services is also happy to coordinate on-campus information sessions or interviews and accepts gently worn professional clothing for our Career Closet yearround. We are located in the Fidel Building, Room 262.

people you know



1950's

Alan Cheetham (Class of 1950) received a president's medal from the International Bryozoology Association for his significant role in



the founding and history of the IBA. Alan served as the organization's first president, 1956-1968, and then on its council until 1974. The association presently has 200 members in 40 countries who study all aspects of living and fossil Bryozoa, small aquatic invertebrates distributed widely throughout the world's ocean and in fresh water on all the continents but Antarctica. Alan's previous awards include the Paleontological Society's highest award the Ps Medal (2001) the Society for Sedimentary Geology's

Moore Medal (1997) and the distinguished Achievement Award from the NMT Alumni Association (1990).

Colgate Craig (Class of 1953) is retired and in business as Framing Concepts Gallery in Albuquerque, N.M.

1970's

James Ivie

(Class of 1972) is a regional engineer for Gulf of Mexico and Southern Louisiana for Baker Hughes in Lafayette, La., where he has worked for 25 years. He also recently welcomed greatgranddaughter, Abigail, to his family.

1980's

Christopher McCowan

(Class of 1985) ASTM International Committee E28 on Mechanical Testing has presented the Award of Merit to Christopher McCowan, project leader of the Impact Verification Program at the National Institute of Standards and Technology in Boulder, Colo. The Award of Merit and its accompanying title of fellow is ASTM's highest organizational recognition for distinguished service and outstanding participation in ASTM technical committee activities.



An active member of E28 since 1992, the committee recognized McCowan for his notable leadership and contributions to the development of standards in the field of impact testing. He is the former longtime chairman of Subcommittees E28.07 on Impact Testing and E28.93 on Papers and Symposia, and received the E28 Excellence in Standardization Leadership Award in 2011. He has worked extensively on the constant revision of ASTM E23, Standard Test Methods for Notched Bar Impact Testing of Metallic Materials, a popular standard used by several other ASTM committees and all over the

world. In addition to his work with E28, McCowan serves on Committee E04 on Metallography and is a member of the editorial board for the ASTM Journal of Testing and Evaluation.

McCowan has more than 25 years of experience in evaluating and interpreting features of microstructures and fracture surfaces and relating these features to mechanical properties and failure criteria. He has worked on several high profile failure projects including the World Trade Center Towers investigation, the blender explosion at Napp Technologies Inc. and the siphon failures in the Central Arizona Project.

A graduate of the Colorado School of Mines, Golden, Colo., where he received a master's degree in metallurgical engineering, McCowan also holds a bachelor's degree in metallurgical engineering from the New Mexico Institute of Mining and Technology, Socorro, N.M. He joined NIST's Material Measurement Laboratory,

Applied Chemicals and Materials Division, in 1985 as a material research engineer, and assumed his current role in 2006.

ASTM International is one of the largest international standards development and delivery systems in the world. ASTM International meets the World Trade Organization (WTO) principles for the development of international standards: coherence, consensus, development dimension, effectiveness, impartiality, openness, relevance and transparency. ASTM standards are accepted and used in research and development, product testing, quality systems and commercial transactions.

1990's

Dr. Peter D. Milewski (Class of 1991) started a new job in July. He is now the research and development manager of Decorations and Coatings Technology at World Kitchen in Corning, N.Y. Previously, he worked for

14 years as a Senior Lamp Development Engineer at Philips Lighting in Bath, N.Y.

2000's

Donald E Wenner III (Class of 2004) finished his urology residency at the University of New Mexico in June and started his practice in Roswell, N.M.

Nathan Wenner

(Class of 2006) earned his Doctor of Veterinary Medicine degree from Colorado State University in Fort Collins in May. He started a veterinary practice in Roswell, N.M.



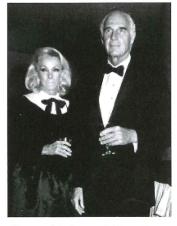


in memoriam

Vernon "Moose" Taylor

For as glamorous a life as Vernon "Moose" Taylor led, he was not one to make a big deal of it.

Taylor and his late wife, Ann, had the financial means to live large — and they did, in Denver, Vail, New York and London — but few outside an immediate circle realized just how well connected they were.



Vernon Taylor and his wife, Ann, in 1982 at an annual event for the Denver Art Museum. (Denver Post file)

Taylor was 97 when he died at home in his sleep on May 21, 2013, on what would have been the 67th anniversary of his marriage. Ann Bonfoey Taylor died in 2007, and his health had been in decline since then.

The Taylors were friends with Prince Philip and Princess Anne of Great Britain and had them as guests at their Jefferson County home when the royal father and daughter made separate visits to Denver in 1987 and 1982, respectively.

Their winter home in Vail, which writer Ted Katauskas of Vail-Beaver Creek Magazine describes as "the gravitational center of Vail's social universe, around which everything and everyone of any consequence orbits," was the setting for dinner parties attended by such luminaries as Gregory Peck, Truman Capote, Gerald Ford and Henry Kissinger.

Born March 4, 1916, in Indiana, Pa., Vernon Taylor earned the nickname "Moose" for both his size and his exploits on the Taft School football field. After Taft, he attended New Mexico School of Mines before transferring to Dartmouth College, from which he graduated in 1939.

A naval aviator during

World War II, Taylor flew sorties from an aircraft carrier stationed off the Aleutian Islands. After the war, he joined his father in the family business, Westhoma Oil Co., and established its Denver office in 1950.

The couple built a magnificent stone manor house on 160 acres in Jefferson County, complete with stables, horses and fox-hunting hounds. It was there that they hosted the visiting royalty, and, in 1997, wives of the world leaders here for the economic Summit of the Eight.

They spent summers on their cattle ranch in Montana.

Taylor balanced a jet-set life with philanthropy. He served on the boards of the former Presbyterian/St. Luke's Hospital Foundation, the Smithsonian Institution, the World Wildlife Fund and the Boys & Girls Clubs of Metro Denver.

"He joined our board in 1962, two years after we were established," recalls Boys & Girls Clubs president and CEO John Arigoni. "He served until 1990, and was a strong supporter of the concept of leveling the playing field for all children so that they'd have a chance to reach their full potential."

Taylor also served on the boards of Amax Gold, Union Pacific Railroad, Mallinckrodt Group, Cyprus Minerals, Colorado National Bankshares and Placer Dome Ltd. He belonged to the Denver Country Club and San Francisco's exclusive Bohemian Club, as well as the former Denver Club, Petroleum Club and Brown Palace Club.

Survivors include four sons, Vernon III, Douglas, Robert and Craig, and 11 grandchildren.

Memorial contributions to the Dumb Friends League, Morris Animal Foundation or Denver Museum of Nature & Science are suggested. Dominic Joseph Sandoval, age 28, born in Albuquerque, NM on September 2, 1984, and passed away unexpectedly on June 19, 2013 in Ventura, California.



Dominic is survived by parents, Bennie and Merlinda Sandoval; brother, Bennie Armando, (Candice and Wesstyn); his grandparents, Bennie and Adela Sandoval, Mary Trujillo; Dom's girlfriend, Michaela Gomez; many aunts, uncles, cousins and friends. Dominic was preceded in death by grandfather, David Trujillo; and uncle, Steve Trujillo. Dominic graduated from West Mesa High School, Class of 2003, with academic honors, participated in football and baseball. He won the Mr. Mustang Contest his senior year.

Dominic graduated 1st Honors with a degree of Bachelor of Science in Electrical Engineering, Class of 2009, from New Mexico Institute of Mining and Technology.

While attending NMT, Dominic was the Regional Student Representative of the Society of Hispanic Professional Engineers.

He was employed by NAVAIR as a Flight Test Engineer on the F-18 Navy jet fighter based in Point Mugu, California. Dominic was an avid snowboarder and ventured in many activities including surfing, kayaking, hiking, fishing, biking, skydiving and four-wheeling. He loved to dance and enjoyed traveling to many states, attending concert venues. Dominic was a selftaught acoustical guitarist. Dominic's latest endeavor was stand-up comedy, performing at various clubs in the Los Angeles area and was a regular at the Ventura Harbor Comedy Club.

Dominic always strived to

succeed in any adventure that came his way. Our beloved Dominic's life ended too soon and he had not fulfilled all his dreams. His smile and personality brightened every life he touched. He will be greatly missed by all who had the privilege of knowing him. The world was a better place with him in it. Our lives without Dominic will have a void that will never be filled and only our faith in God will give us strength in the days to come.

Special thanks to the Staff at NAVAIR, as well as friends and neighbors from the Ventura area for help and support through this difficult time.

Please visit www. gabaldonmortuaryinc. com to sign the online guestbook.

Jennifer Susanne
Backstrom 42, of Tucson
left and went to be with
our Lord on Sunday,
August 11, 2013 due to
a sudden and unexpected
embolism.

Jennifer was born in

Albuquerque, N.M. in 1971 to Don and Edith Menning. She grew up in and around Albuquerque, earned a bachelor's degree in physics from New Mexico Tech in Socorro, and earned a post-baccalaureate teaching certification from the University of Arizona. She had joyfully and enthusiastically taught elementary students in both private and public schools in the Tucson area for 17 years, most recently at Indian Oasis Elementary in Sells, Arizona.



She was an active member of El Camino Baptist Church, where she and her family participated in the music and worship ministry. Jennifer leaves behind her husband of 21 years, Eric and children, Michaela, Brand and Kirsten, as well as her brother, Peter and her father, Don.

Bobbe J. Forster

Bobbe J. Forster passed away on Sept 13, 2013 in her home in Alto, NM after a 3-year battle with colon cancer. Bobbe is survived by her husband Jim, sons Scott and Steve and five grandchildren.



Bobbe was born in Cedar Rapids, Iowa. Most of her childhood was spent in Oregon, where she became a champion swimmer while in school, swimming for a national championship swim team.

She came to New Mexico as a freshman in high school and attended Sandia High School in Albuquerque. She spent her junior year in Argentina as a foreign exchange student. She appeared in Who's Who in America as a senior at Sandia. Bobbe enrolled at NMT in 1964 and married Jim in December 1966. She graduated in 1968 with a

BS in Mathematics (with highest honors).

Bobbe became a math teacher in the Socorro school system, teaching seventh and eighth grade math. In 1980, Dr. Ralph Ball, then chairman of the math department at Tech, called Bobbe and asked her if she would teach an evening class of College Algebra for one semester.

That was the start of a 23year teaching career for Bobbe at Tech, teaching lower division math classes up to third semester calculus. When math labs were introduced, she designed and implemented all the material for the labs. Bobbe loved her teaching at Tech and often remarked how lucky she was to have a job doing what she would gladly have done for free. One student asked her how she could get so excited about calculus. Another accused her of dancing across the classroom in front of the class while writing on the blackboard. Her office was always open and filled with students. She loved spending time with them. After retiring in 2003, she enjoyed time traveling around the world and spending winters at her home on the Sea of Cortez in Mexico.

Jennifer Martin Neuman-Roper, 44, went to be with the Lord on Friday, November 8, 2013. She was preceded in death by her father, Pete Roper; paternal grandparents, Ada Roper, Ellis Roper and Juanita Roper, and maternal grandparents, Grace McLaughlin and Berlin McLaughlin. She is survived in life by her beloved wife, Angelique Neuman-Roper; beloved sons, Jayms, David, and Damion; mother, Bonnie McLaughlin of Arkansas; step-mom, Beth Gordon and numerous other relatives and friends. After graduating from NMIMT with a degree in Materials Engineering, she worked as a technician at LANL,



and later as the Technology Director at the Pueblo of Pojoaque Boys and Girls Club (PPBGC). Jen's passions were her family, technology, reading, and board games. Jen will be missed deeply and remembered fondly. In lieu of flowers, donations may be made to the Jen Roper Memorial Fund at the Los Alamos National Bank for scholarships to be awarded to youth attending PPBGC.

Editor's Note: The law allowed Jen Roper and Angelique Neuman less than three months of official marriage, after they'd spent more than 21 years committed to one another. On Friday, after fighting together with her partner for quick approval of same-sex marriage licenses in Santa Fe, Jennifer Martin Neuman-Roper, 44, died of brain cancer. "My condition has made my desire to marry Angelique far more urgent," Neuman-Roper wrote in an affidavit. "I may not live much longer, and I cannot wait until the state gets around to finally acknowledging the importance of my relationship." Jackie Jadrnak, Albuquerque Journal http://www.abqjournal. com/301281/news/quietcouple-helped-blaze-samesexmarriage-trail.html

the last word

chris frederick

by Valerie Kimble

Four years ago, Chris Frederick was looking forward to a follow-up interview for a job with the U.S. Border Patrol when he took a curious diversion – a tour of the New Mexico Tech campus and a look at its mechanical engineering program.

"I've always been a gearhead," said Frederick, 29, one of those kids who enjoyed taking things apart and working under the hood of a screaming hot rod. One might have expected Frederick to continue his education in vehicular mechanics after graduating from Los Lunas High School in 2002, but he opted for studies in the social sciences, graduating with degrees in psychology and sociology from UNM.

During his student years, Frederick worked in the psychiatric unit at the UNM Hospital, Presbyterian, Lovelace and Memorial hospitals, and in case management after graduation. He spent a year as a care coordinator assisting with patient treatment. "I found it rewarding to work with patients, treating their symptoms and seeing them

get better," said Frederick, who by this time was training for the Border Patrol post. He excelled in wrestling and track and field in high school and remains physically active, conscious of the balance between mind and body.

The return to college life and New Mexico Tech's core curriculum presented its own challenges. "I had never taken physics or chemistry, and it was really difficult," Frederick said. Loren Jacobsen, a retired Sandia National Laboratories employee who spent several years teaching a "pre-physics" course at Tech, helped him out his first semester. He has performed research in the robotics interface laboratory with advisor Dr. David Grow. Frederick previously worked on research projects with Dr. Sayavur Bakhtiyarov and Dr. Nadir Yilmaz."The thing that stands out for me, is that Tech students get to work in the lab from day-one," Frederick said. "Also, the involvement that professors have with their students. I know them, and they know me. Faculty appreciate the students – and we appreciate the faculty."

Frederick spent the 2013 spring semester at Tech as a co-op student at a Honda plant in Anna, Ohio, designing assembly line robotic parts from three-dimensional models.

"We'd take the model to the machine shop, get a quote, then test the parts on engines," he said. Just for fun, Frederick modified high-performance vehicles for the Honda Automotive Racing Team, an activity he enjoys in his spare time.

Here's a fun fact: the company chose Frederick as one of only five individuals at the Ohio plant to work on a second-generation prototype of a high-performance vehicle. "I felt very privileged," he said.

Frederick recently completed an internship with the U.S. Air Force at Sandia Laboratories' Space Safety Division, monitoring orbiting space debris.

"My ultimate goal is to work for Ferrari or Bugatti as an auto race engineer, working for Formula One or Le Mans teams," said Frederick. "They have positions with Honda, so I'll probably apply there."

He has met alumni working for Honda Motors in Marysville, Ohio, who have given him company insight. In the meantime, Frederick is in no hurry to bolt from campus. His fiancé, a law student at UNM, is scheduled to graduate in 2016, so he has some leeway in completing his degree. He is less interested in following the money than in following his heart.

"I just want to make sure I'm going to be happy, to do what I like," he said.

Vroom-vroom.



Chris Frederick in the fluids lab



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