Floyd M. "Steve" Stevenson passed away at his home in Colorado Springs, August 10, 2005 at the age of 94. He was born in Marshall, Oklahoma, April 15, 1911. He studied Petroleum Engineering at The University of Tulsa and graduated from Oklahoma A&M with a degree in Mechanical Engineering in 1933. He was a member of the Kappa Alpha fraternity.

In 1946, Stevenson formed Signal Oilfield Service operating cable tool rigs in Oklahoma and Kansas. He bought his first rotary drilling rig in 1953, forming Signal Drilling Company. In 1954, he moved his family to Littleton, Colorado, as it was less expensive to move the family than to move the rig back to Oklahoma. Both Signal companies expanded and operated in the Rocky Mountain Region until their sale to Petrolane in 1978. Stevenson retired in 1982 and moved to Palm Desert, California.

Stevenson received many industry honors over the years. He was president of the American Association of Oilwell Drilling Contractors (now International Association of Drilling Contractors) in 1962-63. He was president of the Denver Petroleum Club and served on various boards of volunteer organizations in the Denver area. He was an active member of Cherry Hills Country Club and later, Ironwood Country Club in Palm Desert, California.

Steve Bellovich, dean of the College of Engineering and Natural Sciences at The University of Tulsa said of his passing, “Steve” Stevenson was probably the kindest, sweetest man I ever met. He was a great friend of The University of Tulsa, and his generosity helped make the University a better place. We will all miss him.”

In 1991, Betty Stevenson, his wife of 58 years, passed away. His brothers, Orvin and Leo, and his daughter, Sally J. Drabing, also preceded him in death. He is survived by his son, C.R. (Dick) Stevenson, daughter Marsha Stevenson Drabing and son-in-law Dr. John H. Drabing, as well as eight grandchildren and four great-grandchildren.

Contributions in “Steve” Stevenson’s name may be made to The University of Tulsa or to the Colorado Springs Osteopathic Foundation, 15 West Cimarron, Colorado Springs, Colorado 80903.
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EDMUND F. RYBICKI, THE HARRY H. ROGERS PROFESSOR OF MECHANICAL ENGINEERING at The University of Tulsa, received the 2005 Engineer of the Year Award on June 30, 2005 at the Oklahoma Society of Professional Engineers Awards banquet. The award recognizes an engineer for outstanding leadership, unerring effort, and unusual initiative and success in advancing the engineering profession.

Craig Whitbeck, OSPE president, said of Rybicki, “His efforts and success in the engineering profession have made a significant mark on the nation’s industries. In selecting you for this award, your peers assert that you exemplify the ideal image of a professional engineer.”

Some of Dr. Rybicki’s accomplishments include his name on a NASA computer, sequence entries in both US Navy and US Army procedural manuals, a hip prosthesis device patent, three fellow awards, eight technical paper awards and two teaching awards. He is nationally recognized in several industries including the military, automobile manufacturing, space exploration, medicine and the petroleum industry.

NASA named a computer in honor of Rybicki, citing him for his "contributions to the field of fracture mechanics." The NASA computer, RYBICKI, is used at Langley Research Center in Virginia in materials research. The method, published by Rybicki and his colleague, Melvin F. Kanninen, while they worked at Battelle Columbus Laboratories, is said to be the most popular method in the world for this type of fracture mechanics analysis.

Rybicki also developed the welding sequence that is still used to weld the U.S. Army’s M1A1 battle tank hulls. Over 4,000 M1A1 tank hulls have...
Christi Patton Honored

Christi L. Patton, Department of Chemical Engineering, earned this year’s Challenge X, National Science Foundation Outstanding Incoming Faculty Advisor Award. This award is presented to the individual who best promotes the goals, objectives and activities related to the 2005 Challenge X: Crossover to Sustainable Mobility Program at their university. Patton is not only an outstanding teacher but also balances advising and mentoring with project development. She affords her students the opportunity to learn through query and exploration, encouraging them to explore the broader world of engineering through hands-on activity, ensuring high interest levels and depth of knowledge. Using the Challenge X project in this way has developed and strengthened the University’s undergraduate and graduate engineering curriculum, improving the overall quality of education at The University of Tulsa.

Patton received both a trophy and a check in the amount of $15,000 which will go toward a cutting-edge on-board hydrogen storage system for the Challenge-X Team car.
How Henshaw Measures Up  

Does Measurement Measure Up?: How Numbers Reveal and Conceal the Truth  

by John M. Henshaw will be published in April 2006 by The Johns Hopkins University Press. In his book, Henshaw asserts there is a “measurement revolution” occurring in contemporary society. From the smallest units of measurement to the vast expanses of the outer space, human beings are capable of measuring almost anything. He also explores the dark side of measuring including such areas of interest as the global warming debate, standardized testing, No Child Left Behind measurements and DNA fingerprinting.

Kelkar Awarded Williams Endowed Chair

The College of Engineering and Natural Sciences announces the appointment of Mohan G. Kelkar, Professor of Petroleum Engineering, to the Williams Endowed Chair in Petroleum Engineering. Kelkar has been a faculty member at The University of Tulsa since 1983, with full professorship since 1996. Currently, he is chairman of the Department of Petroleum Engineering.

Kelkar has extensive experience in reservoir characterization and modeling, and, in addition to publishing numerous papers in that area, has coauthored a book entitled Applied Geostatistics for Reservoir Characterization, published by the Society of Petroleum Engineers (SPE).

No Science Teacher Left Behind

In the summer, 2005, The University of Tulsa and local public schools partnered with one another to create the Science Teachers’ Workshop, a two-week program followed by nine months of continued education funded by a $105,000 dollar grant from No Child Left Behind. Jerry McCoy, applied assistant professor in the Department of Physics and Engineering Physics at TU, was the primary facilitator of the program. McCoy says, “It was a very successful two-week workshop and will continue in follow-up.” The Science Teachers’ Workshop is designed to exceed the government’s Priority Academic Student Skills objectives and to give teachers access to human resources they may not have otherwise.

The program helped secondary science teachers in all divisions develop effective math-intensive demonstrations and lab exercises illustrating key science concepts. The goal was to teach these concepts without using difficult-to-find equipment. All the labs were built around the idea that science concepts can be easily demonstrated using commonly found items. Participants were motivated to work on their own using the skills they learned in the program. Participating teachers were encouraged to pass on the knowledge to their colleagues. The collaboration among TU, Jenks, Union, Broken Arrow and Tulsa Public Schools is a collaboration committed to educational transformation and excellence. Twenty-one teachers are currently participating in the program. Find out more about the workshop and materials by visiting www.physics.utulsa.edu/mspworkshop.

Faculty Member and Two Undergraduates Awarded Patent

A patent covering “Nanobattery Systems” was awarded to The University of Tulsa, Dale Teeters, chair of the Department of Chemistry and Biochemistry, and two undergraduate students, Lane Fisher and Nina Korshova.

The patent has received considerable attention in the tech world. Teeters is now senior vice president of Colossus, makers of the Colossus NanoBattery.

National Merit Recruiting

For the 2005-06 academic year, one of every eight incoming TU students (13 percent of the freshman class) was a National Merit Finalist, a fact that puts The University of Tulsa in the top 10 nationwide for National Merit Scholars per capita. Two-thirds of TU’s National Merit students are from out of state. The College of Engineering and Natural Sciences enrolled approximately 65 percent of the National Merit Finalists at the University this year.

The National Merit Scholarship Corporation has been using standardized testing and other criteria since 1955 to find the highest achieving high school seniors in the nation to be recommended for college awards. This year, approximately 1.5 percent of the eligible seniors in the nation were granted this honor. The average ACT score for these students is 33.5. The average SAT score is 1460.

If you’re thinking this is an unusual year at The University of Tulsa, consider 2004 and 2003 when a whopping one out of ten TU freshmen was a National Merit Scholar.

But TU students aren’t just smart; they’re happy.

In the Princeton Review, TU was noted as the 9th place school in the country for “Happy Students” and 10th best for “Quality of Life”. TU Recruiter Nancy Pilkington is looking for a few more good students. According to Pilkington, National Merit Finalists who name The University of Tulsa as their “school of choice” will be considered for a full room and board tuition scholarship for four years as long as they maintain a 3.25 grade point average. The total value of a scholarship this year is more than $25,000. That’s enough to make a TU parent happy, too.

For more information, contact nancy-pilkington@utulsa.edu.
Bellovich and Azar in Venezuela

Hector Rodriguez, President of The University of the Andes, visited The University of Tulsa last fall to meet with graduate students who had earned undergraduate degrees in petroleum engineering at the Venezuelan school. After his trip to TU, Rodriguez invited Dean Bellovich to visit his school. Bellovich appreciated the invitation, but after saying goodbye to his guests, he put away the idea... until... several months later a letter arrived from Universidad de los Andes (ULA) inviting Bellovich and Jamal Azar for a visit. Bellovich believed the trip would “strengthen our relationship [with ULA]” and foster student and faculty exchanges. Bellovich ebulliently notes, “They treated us like royalty... I was spoiled.”

ULA is seated in a mountain valley in the North Andes, 5,000 feet above sea level. The school is located about an hour’s flight from Caracas in a city only slightly smaller than Tulsa.

Lynette Bennett Fossil Donation

In 1964, Ms. Lynette Bennett was performing on Broadway eight times a week in Funny Girl with Barbra Streisand. While this might be a dream come true for many people, Bennett had other dreams in mind. She was a paleontology buff and heard about an excavation for a golf course in Lincoln Park, New Jersey. She didn’t just read about it, she went to see the excavation in person. As she tells it, “The Hudson River Valley Museum agreed to give me documentation to get me onto the site.”

Bennett put in hours of hard work, carefully exposing fossils and gently whisking away the dirt to reveal fossilized animal tracks, wormholes and some other very exciting discoveries. She collected six large sandstone slabs from that site. Before moving to Oklahoma, Bennett gave a 500-pound slab of a series of tracks to the Hudson River Valley Museum. She kept six Triassic rocks, which included worm burrows, mud cracks, various tiny fossils and dinosaur tracks. She recently donated these specimens to The University of Tulsa.

After examining the slabs, Bob Scott, TU geosciences research associate, pointed out the prints on Bennett’s find “are like those made by Anchisauripus or Grallator. These reptiles were some of the oldest dinosaurs because the sandstone deposits are dated as Triassic, which is the first period after the Permian extinction and spanned from about 250 to 200 million years.” He notes the animals that made the footprints had three long toes with claws. The prints are about six inches long and four inches wide. The donation made by Bennett is a very exciting gift for The University of Tulsa.

Bennett is married to Rev. Warren Danskin, a Methodist pastor in Prague, Oklahoma.
SPE Paper Wins Top Prize

In April of 2005, Jimmy Lozano placed first in the Graduate Student Division of the Society of Petroleum Engineer’s (SPE) Rocky Mountain Mid-Continent Regional Paper Contest held in Butte, Montana. He received his Master of Science in 2005 from The University of Tulsa. Lozano’s presentation in the Graduate Student Division was titled “Effect of Elongational Flow through the Drill Bit Nozzle on the Rheology of Polymeric Drilling Fluids.” He was the 2002 winner of a Society of Petroleum Engineers (Dallas Section) Engineering Scholarship.

Women in Chemistry

On October 21, 2005, the Einsteinium Chapter of Iota Sigma Pi, a National Honor Society for Women in Chemistry, initiated six new members. E. Ann Nalley was the keynote speaker for the event. Nalley, a professor of organic chemistry at Cameron University in Lawton, Oklahoma, is the 2006 national president of the American Chemical Society. Iota Sigma Pi is a metropolitan organization encompassing students from TU and other area universities and women chemists working in the industry. Initiates includedTU students Karin Joanna Brumback from Willow Park, Texas; Dalia I. George from Tulsa; Lauren Kimberly Hutter from Broken Arrow, Oklahoma; Brigid DeCoursey from Little Rock, Arkansas; and Suong Nguyen from Wichita, Kansas. Tamra Leigh Hunsker, a student from Oral Roberts University, also participated.

Challenge X Team

In 1987, the U.S. Department of Energy (DOE) began sponsoring challenges encouraging thousands of engineering students to achieve greater fuel economy, lower emissions and improved safety, performance, utility and consumer appeal in motor vehicles. In 2005, General Motors Corporation (GM), DOE and other government and industry leaders created a competition called “Challenge X: Crossover to Sustainable Mobility.” This groundbreaking, three-year competition gives engineering students hands-on opportunities to work with leading-edge automotive propulsion, fuels, materials and emissions-control technologies. Student teams from only 17 universities are participating in the three-year program including a group from TU’s College of Engineering and Natural Sciences. Year two of the Challenge X competition requires student teams to develop the physical powertrain, based on the previous modeling, and install it into a 2005 Chevrolet Equinox. Students will use The MathWorks tools to further refine their powertrain design and control strategy.

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TriBeta Research Scholarships

Beta Beta Beta (TriBeta) is a national society for students, particularly undergraduates, dedicated to improving the understanding and appreciation of biological study and extending boundaries of human knowledge through scientific research. In 1990, the executive committee of TriBeta initiated the development of the TriBeta Foundation. The Foundation supports undergraduate research through Foundation Research Scholarships. Cash scholarships are awarded annually to support deserving undergraduate research projects. Beginning in 1994, 90 percent of the accumulated interest derived from the Foundation’s funds was distributed to select undergraduate student members of TriBeta. Recipients were chosen on the basis of an application reviewed by the regional vice president and district directors. Three students, all seniors in biological science and members of the Pi Alpha Chapter of TriBeta at TU, applied for and received research scholarships totaling $1300.

- Andrew Ausmus, mentored by Laura Berkowitz, received $500 for his project: Analysis of MES-1 Phosho-Tyrosine Relationship in C. Elegans Embryos.
- Molly White, mentored by Kenton Miller, received $500 for her project: IL-4 Regulation of ST6 Gal I Promoter in Tissue Culture Cells.
- Anthony Papinsick, mentored by William A. Rosche, received $300 for his project: Antimicrobial Activity and Resistance of Thyme Oil.

Congratulations to Andrew, Molly and Anthony!

NSF Fellowships

Many scientists know the Goldwater and National Science Foundation (NSF) awards are two of the most prestigious national awards for students in the sciences. Both scholarships are for students who plan to pursue research and doctorates in the sciences. The Goldwater is an undergraduate award and the NSF is a graduate award. 2005 winners of the NSF Graduate Fellowships include geosciences student, Alison Galatian; engineering physics, Vanessa Russo; math/computer science student, Mary McGlohon, and geosciences student, Andrew Matzen. With four NSF winners, TU’s College of Engineering and Natural Sciences is in the same league as Duke and Princeton universities. TU is fast becoming known as one of the most prestigious engineering and natural science schools in the world. TU students are earning highly regarded awards at an amazing rate. In addition to the large number of NSF scholarship winners, only Duke and Cornell universities can boast more Goldwater scholarship recipients for science, math and engineering in the last six years than The University of Tulsa.

Alumni News

Eugene Stalnaker wasn’t always an emergency room physician. He came to The University of Tulsa in 1957 to attend Spartan School of Aeronautics to become a flight engineer. When Spartan lost that program, he went to The University of Tulsa to train as an aeronautical engineer, graduating from TU in 1963. He liked the size of TU and didn’t realize until later what great access he had to top professors in the field.

“The thing I didn’t realize, until I got to bigger schools... I didn’t know what a TA [teaching assistant] was. They [TU] just didn’t use them. A professor ran the lab.” He chuckles looking back. “No wonder things went so smoothly at The University of Tulsa.”

After TU, Dr. Stalnaker went to Illinois Institute of Technology in Chicago to study jet propulsion. He then went to work for North American Aviation (NA). NA paid for Stalnaker to return to The University of Tulsa where he pursued a Master’s Degree in Mechanical Engineering. During that time he worked on NASA’s Lunar Excursion Module (LEM) for the Apollo program. The experience included engineering the cables that would attach the LEM adaptor to the helicopter transporting it from Tulsa to Cape Canaveral. After testing the cables for days, Stalnaker and his team chose to counter-wrap the cables that connected the unit to the high-lift helicopter. The pilot saved the LEM adaptor from destruction when he discovered that the group who finally loaded the adaptor (not Stalnaker’s team) had not counter-wrapped the cable. It was set down on a pig farm in Arkansas, and the cables were shipped back to Tulsa to be counter-wrapped as planned so the rotation wouldn’t break them. Stalnaker looks back on the near miss knowing the LEM adaptor’s destruction would certainly have set the Apollo program back significantly.

Stalnaker then went to work for Pan-American Petroleum doing research in the field. He remembers being housed at the research facility at 41st and Yale that now serves as a satellite campus for The University of Oklahoma. After eight years as a researcher he decided to return, once more, to his favorite university — The University of Tulsa. He took pre-med classes and earned a spot in The University of Oklahoma’s Medical School. Because they had such a large class that year, OU arranged to have 17 students practice in Tulsa. This was good news for Stalnaker who had been commuting from Tulsa to Oklahoma City for two years during the nation’s gas rationing period. Stalnaker remembers filling up Saturday night for his Monday morning commute.

Stalnaker spent his residency in Lubbock and practiced as an Emergency Room physician for 13 years in Texas. After that, he spent eight years as a physician with the Texas Tech Student Health program and taught part-time in the Math Department. When I asked about his many careers, he simply admitted, “I never get bored.” Stalnaker has retired from his day job and now enjoys time with his wife. He admires how hard she must have worked all those years. “I didn’t know how much there is to do here at home.”
Alums Keep Learning

CRYSTAL R. ICENHOUR (Perry) earned her Ph.D. degree from The University of Tulsa in 1995. She has since become a research associate for the prestigious Duke University Medical Center to complete postdoctoral training in Medical Mycology.

Bob Carlile Will Be Missed

University of Tulsa alumnus Dr. Robert (Bob) Carlile passed away October 18, 2005 in Tulsa. Carlile received a Bachelor of Science and a Masters of Science in Petroleum Engineering from The University of Tulsa. He received his doctorate from Texas A & M University. After graduating, Carlile taught at The University of Missouri at Rolla and at Texas Tech where he served as chairman of the program. “Dr. Bob” has been an ardent supporter of The University of Tulsa. He volunteered his services to recruit students and provided assistance to undergraduates. A University of Tulsa scholarship bears his name. Carlile was a lifetime member of the Society of Petroleum Engineers earning the Legion of Honor Award for 50 years of petroleum industry service.

CEO for a Day

Robello Samuel graduated in 1997 from The University of Tulsa with a Ph.D. in Petroleum Engineering. Presently, Dr. Samuel works as the senior technical advisor in Drilling for Halliburton. Samuel recently got a chance to experience the feeling of commanding the ship at Halliburton. Samuel explains, “Every year our CEO seeks ideas from the employees and selects the best of the best to act as CEO for a day. This year I was selected.” This is one of the highest awards presented at Halliburton. Although Samuel didn’t share CEO David Laser’s salary, he enjoyed being in charge of this international corporate giant for a day.

TU Students Preferred

DAN LOVELESS, President of Tulsa Heaters, graduated from The University of Tulsa with a Bachelor of Science in Petroleum Engineering in 1976. He says he prefers to hire TU graduates. Having experienced the program, Loveless knows our students are the best.