

Arkansas Engineer

The Alumni Magazine
of the University of Arkansas
College of Engineering

Fall 2018

**University of Arkansas College of
Engineering faculty have earned
a record **SEVEN** Faculty Early
Career Development Awards from
the National Sci-
ence Foundation,
totaling more
than **\$3 MILLION**
to fuel innovation
in the research lab
and the classroom.**

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LETTER FROM THE DEAN

It's been a tremendous year in the University of Arkansas College of Engineering. Our students have been developing companies, our professors have been recognized among the best in their fields and our alumni have led the way for generations of future Arkansas engineers and computer scientists.



You can read more about all of those accomplishments in the pages ahead.

We're sharing these stories with you because it's important for you to know what we've been up to. After all, we want to be sure when you tell someone you're a University of Arkansas engineer, that mantle brings to mind the best in engineering education and achievement.

I hope you'll take some time to see how our students, faculty and your fellow alumni have been working to make you proud to be a graduate of the University of Arkansas College of Engineering.

We'd love to celebrate your successes, too! Be sure to update your information with the Arkansas Alumni Association at arkansasalumni.org, and email us at engrcomm@uark.edu.

Warmly,

John English

Dean, College of Engineering
Irma F. And Raymond F. Giffels Endowed
Chair in Engineering

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John English

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College of
Engineering
Corporate Partners



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Inno- vention

How U of A researchers are creating new technology that simulates human blood vessels

Two University of Arkansas engineering professors and an engineering doctoral student have formed **Vivas LLC**, a new company with licensed technology for a gel that replicates human tissue, improving training for clinicians and leading to better outcomes for patients.

VIVAS HAS PARTNERED with Humimic Medical LLC, a Fort Smith company that produces medical gels for training, testing and device development. These medical gels are clear or opaque models, made of synthetic gelatin, that accurately simulate human tissue.

The U of A researchers – Morten Jensen, associate professor of biomedical engineering; Jamie Hestekin, professor of chemical engineering; and Megan Laughlin, a doctoral student in biomedical engineering – used Humimic’s medical gel to create a unique model with small interior channels that simulate human blood vessels. The researchers can pump fluid through these models to simulate blood flow.

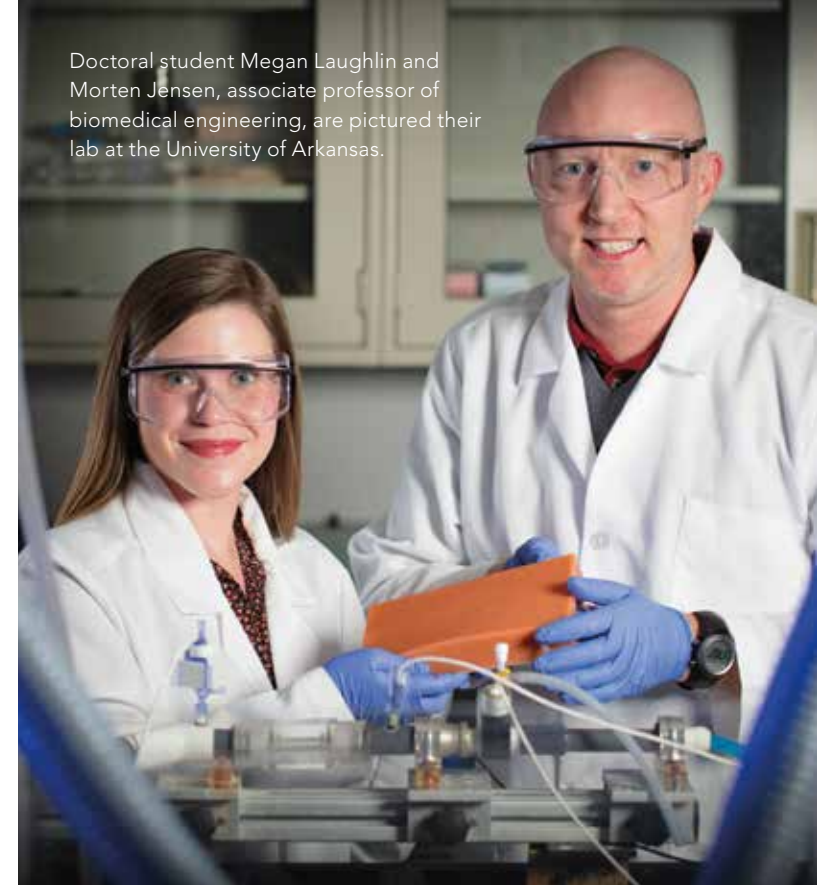
Their technology addresses many clinical training problems – repeated needle sticks on patients by physicians and nurses, for example. Providing models for these practices ensures equipment works properly and helps build confidence before performing procedures on humans. Medical staff can practice inserting syringe needles into the artificial blood vessels, and the correct positioning of a syringe needle in the blood vessel can be confirmed by the presence of blood-mimicking fluid that enters the syringe from the artificial vessel during the procedure.

The gel models also mimic human tissue in consistency and firmness. They can be transparent for demonstration purposes or opaque, like real tissue, with a variety of skin colors. When an ultrasound transducer is applied to the opaque gel, the ultrasound images appear the same as those taken on the human body. When blood-mimicking fluid is introduced, ultrasound images show multi-colored areas to indicate the presence of this fluid, just as an ultrasound detects blood flow in real human tissue.

“We use models of the human fluid flow system extensively in our cardiovascular biomechanics research laboratory,” Jensen said. “This project was a natural by-product of those efforts.” The collaboration with Humimic Medical started because Laughlin and another doctoral student needed realistic models that mimicked human blood vessels. Laughlin’s doctoral projects focus on congenital conditions of restricted flow at the aortic valve and the aorta and how to optimize blood flow with devices. They had worked with a different company to purchase expensive silicon models to perform experiments.

“Using the Humimic gels, we decided we could make these models ourselves, which were more realistic and at a much lower cost,” Laughlin said.

Doctoral student Megan Laughlin and Morten Jensen, associate professor of biomedical engineering, are pictured their lab at the University of Arkansas.



Although the initial purpose of the project was to make artificial blood vessels inside the gel for ultrasound imaging and clinical training, researchers quickly realized the combination of their technology and the medical gel could be used to model many aspects of the human body, including organs. The team has begun investigating the possibility of inserting an artificial liver, heart and lungs into gels. They can simulate disease in these organs to test and demonstrate medical equipment and procedures.

The researchers filed an invention disclosure in November 2017, and in January, the University of Arkansas Board of Trustees approved a license agreement for the new technology. Vivas and Humimic Medical started shipping the first products at the end of February. Jensen said the companies have also received international orders, including national government health systems in Europe.

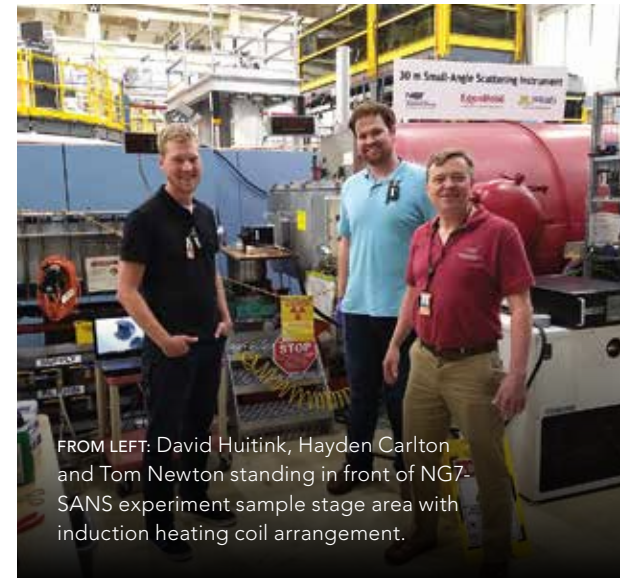
“This industry partnership is already funding university research,” said Hestekin. **“It’s our hope that it will also create high-tech jobs in Arkansas in the next couple of years.”**

Burning the Cancer to Death

Doctoral Student, Professor Win Time at National Lab for Cancer Nanoparticle Treatment Research

A mechanical engineering professor and his doctoral student drove 18 hours in one day for a chance to use a highly-specialized piece of research equipment in Maryland, and the implications of their research could have a big impact on how cancer is treated.

David Huitink, assistant professor of mechanical engineering, and doctoral student Hayden Carlton undertook the journey to collaborate with researchers at the U.S. Department of Commerce's National Institute of Standards and Technology.



FROM LEFT: David Huitink, Hayden Carlton and Tom Newton standing in front of NG7-SANS experiment sample stage area with induction heating coil arrangement.

THE PAIR TRAVELED to the institute's Center for Neutron Research in Gaithersburg, Maryland, to conduct neutron scattering experiments on the NG7-SANS beamline, a 30-meter long device used to detect material and nanoparticle interactions using a directed stream of neutrons, which pass through the material and observe its behaviors and characteristics.

The pair's research focuses on induction heating in nanoparticles. Induction heating refers to the heating of a material by an electric current within it when responding to electromagnetic fields, and Huitink said the practice has implications for cancer treatment research using nanoparticle heaters.

"This phenomenon is a potential path toward cancer hyperthermia treatments, where nanoparticles targeted to attach on to tumor tissue are heated up under influence of an external field, leading to tissue necrosis – burning the cancer to death, basically," Huitink said. "The science is fascinating, but not well understood."

Using a technique known as Small Angle Neutron Scattering, Huitink and Carlton used the NG7-SANS beam to look at how particles move and arrange themselves under an induction field. They also studied the magnetic behavior of the particles themselves. Both sets of information will help researchers design nanoparticles for optimal heating, which could make cancer treatments more effective, Huitink said.

The experiment led to even more opportunities for Carlton.

Carlton applied for and was awarded the opportunity to spend another week at the National Institute of Standards and Technology in June for "Neutron Summer School," where institute scientists teach basic principles, tools and applications in neutron science, something Carlton said has long been a focus of his interest.

"Nanoparticle research as a whole has always piqued my interest, even as an undergraduate," he said. "It's fascinating to me how these tiny particles release so much energy, and how far the breadth of their application goes. It's important to me to further advance nanoparticle induction heating research to not only find the limits of their therapeutic properties, but also to change their role in medical treatment for the better."

Carlton praised Huitink for playing a key role in his success as a researcher.

"I was one of Dr. Huitink's first graduate student hires," Carlton said. "I came from a background with little undergraduate research experience, and Dr. Huitink has helped me along every step of the way with guidance and strong technical knowledge that has made my transition to graduate school seamless. He always offers advice on structuring my graduate curriculum to prepare me for the job I want after graduate school, and he's just an all-around great guy to work for. I couldn't ask for a better graduate advisor."

Huitink said the trip came about after a conversation with U of A mechanical engineering alumnus Tom Newton, who now directs the Center for Neutron Research for the National Institute of Standards and Technology.

Neutron scientists Kathryn Krycka and Markus Bleuel at the center were instrumental in executing the experiment, and Carlton said he left the project inspired.

"Going to NCNR has further influenced my desire to stay in research and potentially work in a national lab after completing the doctoral program here at the U of A," Carlton said. "While observing the dynamic of the scientists there, I saw people who enjoyed and took pride in the work that they did. I'm planning to look for further opportunities to perform research in other national labs."

University of Arkansas College of Engineering faculty have earned a record **SEVEN Faculty Early Career Development Awards from the National Science Foundation, totaling more than **\$3 MILLION** to fuel innovation in the research lab and the classroom.**

Editor's note:

For more about all our winners, visit engineering.uark.edu/nsf-awards.

It was a record-breaking year for researchers at the College of Engineering. An unprecedented seven faculty members won Faculty Early Career Development Awards, known as "CAREER Awards" from the National Science Foundation. The awards are approximately \$500,000 each over five years.

The previous university-wide record was three CAREER awards in one year, achieved in 2011 and 2013.

John English, dean of the College of Engineering, said the achievement reflected a highly effective research program and a bright future for the college.

"To receive even one of these awards is a testament," English said. "But to receive seven in a single year is a clear sign that our early-career faculty members are among the best in the nation, pursuing research that will make a difference in Arkansas and around the world for years to come."

English said special thanks were deserved for Heather Nachtmann, the college's associate dean for research, for her support of these outstanding faculty members throughout the process, and to the college's department heads and faculty for their mentorship of the awardees.

"An achievement of this magnitude truly takes a team effort," he said.

Turn the page to meet the winners. →

Meet the winners



1 Dr. Michelle Bernhardt-Barry, assistant professor of civil engineering, earned her award for her research to expand and improve the use of soil as a building material through fundamental transdisciplinary research and the application of innovative technologies. Her research is aimed at expanding the use of soil as a building material, which would make construction projects in remote places more efficient.

2 Dr. Qinghua Li, assistant professor of computer science and computer engineering, earned his award for his research into automated security vulnerability and patch management for power grid operations. His goal is to make the nation's power grid more secure and reliable.

3 Dr. Tim Muldoon, assistant professor of biomedical engineering, earned his award for his research into a probe that can create high-quality images of living tissues in the human gastrointestinal tract. His research could help doctors treat colon cancer and other diseases more effectively.



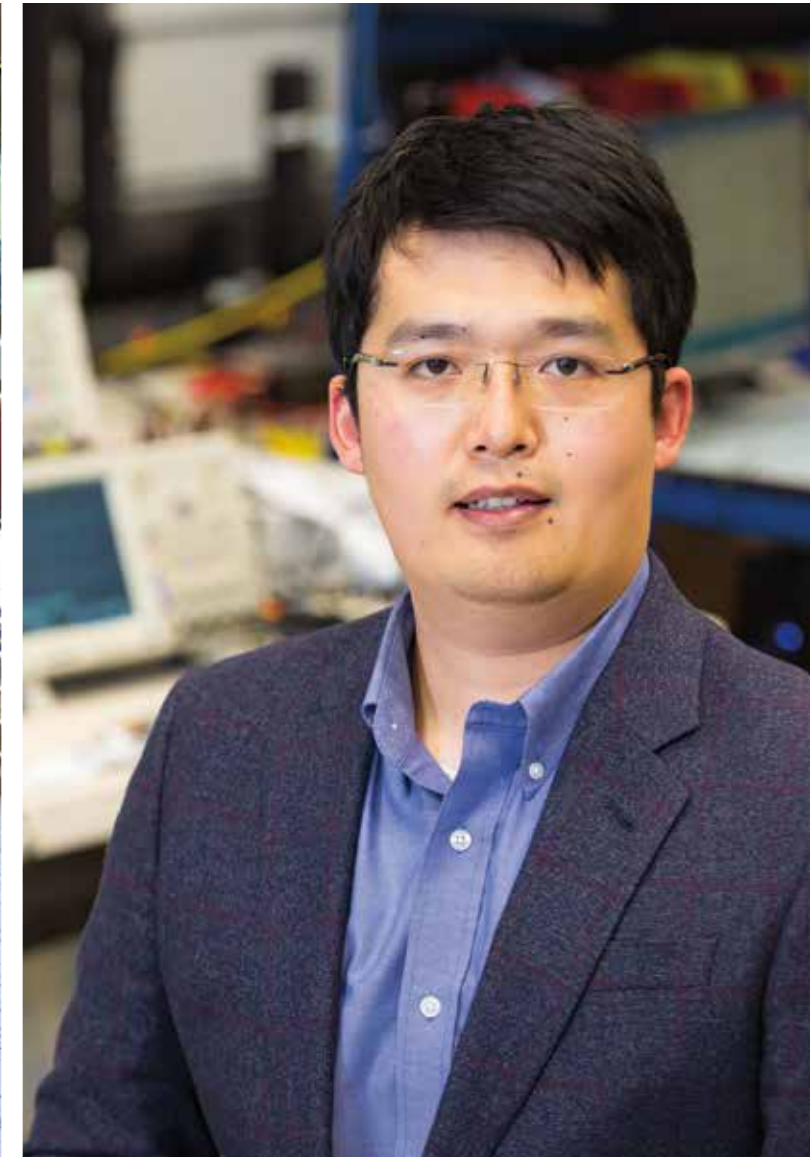
4 Dr. Gary Prinz, assistant professor of civil engineering, earned his award for his research into optimizing 3D-printed metal for use in structures. His research is aimed at understanding how 3D-printed metals behave in high-impact events, like earthquakes or explosions.



5 Dr. Ben Runkle, assistant professor of biological and agricultural engineering, earned his award for his research into sustainable irrigation practices for rice production. His goal is to help growers use less water and produce less methane, without sacrificing rice yields.



6 Dr. Kelly Sullivan, assistant professor of industrial engineering, earned his award for his research into survivable, maintainable and adaptable sensor networks. Those sensor networks can include devices that track forest fires, observe changes in ecosystems, and detect terrorist threats, such as biological, chemical and nuclear attacks.



7 Dr. Yue Zhao, assistant professor of electrical engineering, earned his award for his research into a dual-control framework for next-generation silicon carbide motor drives. His research is aimed at making electric motors smaller and lighter for vehicles on land, air and in the water.



The Path to Graduation

Iliana Hernandez understands sacrifice and hard work. When she was 5 years old her parents gave up promising careers in El Salvador for the sake of their children. At the time, El Salvador was emerging from civil war, its economy was in turmoil, its capital was dangerous – and then an earthquake hit, damaging their home.

“For my parents that was the last straw,” Hernandez said. The family qualified for refugee status in the U.S. and moved with Iliana and her brother, eventually settling in Siloam Springs. Iliana went to school and her parents went to work supporting their children.

“They couldn’t find anything like their office jobs in El Salvador,” she said. “But they told us they had no regrets.”

While her parents worked, they also pursued the ultimate security for their children: citizenship. It was a long, slow process, but finally, two years ago, Hernandez and her family became U.S. citizens.

In school, Hernandez did well in her language studies, but found her real passion was for numbers. She wanted a career that would allow her to follow that passion, but wasn’t sure where to start. Then, she heard about ECAP -- the Engineering Career Awareness Program at the University of Arkansas, which recruits students from underrepresented populations and prepares them to meet the demands of an engineering education. Career problem solved. Well, almost.

“I didn’t even know there were different kinds of engineering,” she said. A three-week summer Bridge program introduced her to chemical engineering, and the idea of working with the processes of manufacturing appealed to her.

Meanwhile, Hernandez was also being recruited by the Honors College Path program, which, like ECAP, provides peer and professional mentors to help students adjust and succeed at the university. She became both a chemical engineering major and a member of the Honors College.

“Path really pushes you to do things you didn’t think you needed that turn out to be exactly what you do need,” she said.

Like a pair of internships, first at the L’Oreal plant in Little Rock, the next at Frito-Lay in Jonesboro. Both went well – so well that she graduated with a job offer to be a process engineer at Frito-Lay.

At graduation, Hernandez wore a cap she decorated with a message in Spanish for her parents. Roughly translated it means “They gave up their dreams so I could have mine.”

“My parents are proud and happy for me, but I could never have done this without their support and example,” she said. “They are my inspiration.”

ADVANCING.
FOSTERING.
SUPPORTING.

NCREPT Expands

State, University Leaders Gather to Celebrate Research Center Expansion

Leaders from the government, business and academic communities gathered to celebrate the expansion of one of the University of Arkansas' leading research centers, the National Center for Reliable Electric Power Transmission, also known as NCREPT.

The ceremony was the culmination of a \$3 million, 5,000-square-foot investment to expand the research and industry partnership capabilities of the center, which is a collaboration between several universities and does work with more than 50 companies worldwide.

Speakers included Chancellor Joseph Steinmetz, Provost Jim Coleman, College of Engineering Dean John English, Meagan Frank from Senator John Boozman's office, Arkansas Senator Jim Hendren, who is a graduate of the U of A's electrical engineering program, and NCREPT Director Alan Mantooth.

NCREPT's research is centered on designing, packaging and testing advanced power electronics, especially in relation to the power grid. It supports three other research centers in the Arkansas Research and Technology Park focused on the power grid, electric vehicle development and cyber defense systems.

The expansion allows for a large-scale cybersecurity testbed for electric, oil and natural gas grid emulation, as well as higher power direct current capability and even more safety surrounding the center's high-power equipment.

Those improvements will have a major impact on their research, Mantooth said.

"These new capabilities mean that we can more accurately emulate cyber attacks and test our solutions in a 'closer to real world scenario' before transferring them to industry," he said. "The

added DC power capability allows us to test the next generation of solar power electronics that are going to higher voltages."

Steinmetz praised NCREPT's success in bridging the university's research with real-world applications by companies.

"It represents our commitment to advancing knowledge, fostering collaboration, and supporting industry through innovation," he said.

Hendren, who in addition to serving as Senate Majority Leader is also a business owner and a member of the Air National Guard, said NCREPT's research benefitted all three sectors of his professional life.

Research into cybersecurity is critical for governments, businesses and the military, Hendren said, and the work taking place at NCREPT plays a key role in protecting the power supply in Arkansas and beyond.



Chancellor Joe Steinmetz congratulates Alan Mantooth, Distinguished Professor of Electrical Engineering and Twenty-First Century Research Leadership Chair in Engineering on the expansion of NCREPT, where industry and university partners can research advanced power electronics.

Having a Ball

The Annual Alumni Awards Banquet and Ball brings together alumni from all eight departments within the College of Engineering to recognize alumni who have achieved distinction in their fields since graduating from the University of Arkansas.

Hall of Fame

Established in 1965, the Hall of Fame is the highest honor bestowed by the College of Engineering. The award recognizes prominent graduates and leaders who have made outstanding contributions to the engineering profession and society as a whole. Members of the Hall of Fame have, throughout their careers, made a difference to the engineering profession and demonstrated concern for improving their communities. Their achievements have brought favorable attention to the College of Engineering, the University of Arkansas and the state of Arkansas. Winners were:

Kevin Brown, BSChE 1981

Executive Vice President, LyondellBasell

William Keltner, BSIE 1959

General Manager, Southwestern Bell

Distinguished Alumni Award

The College of Engineering Distinguished Alumni Award honors the exceptional professional and personal achievements of University of Arkansas College of Engineering graduates. Recipients have achieved distinction in their fields and have provided outstanding leadership and service to their communities, organizations and the College of Engineering. Winners were:

Robert W. Arvin, MSOM 2012

Divisional Vice President - Supply Chain, Walmart

Gregory L. Baltz, BSAGE 1980

Owner/Operator, Running Lake Farms

Roger Cordes, PhD, P.E., BSME 1991

Consultant

Eugene C. Davis, BSChE 1980

RFAB-CMP Engineering/Distinguished Member

Technical Staff, Texas Instruments

John Marshall, BSEE 1976

President, Coastal Partners

Jeremy Stobaugh, BSCSE 2000, MBA 2010

Senior Vice President of Technology and People, Rausch Coleman Homes

Rita Gail Willcoxon, BSIE 1982

Global Engineering Leader for Intelligent Control Systems (retired), General Electric

Daniel H. Williams, P.E., BSCE 1981

President and Chief Executive Officer, Garver

Early Career Award

The Early Career Alumni Award is presented to College of Engineering graduates who are achieving distinction in their fields and show significant promise for professional leadership in state, national and international activities. These individuals have worked in their industries for 15 years or less.

Eric A. DeCuir Jr., MS 2005, PhD 2008

Research Physicist, United States Army

Tyson Hall, BSCHE 2001, MBA 2002

General Manager of Commercial Business Unit and Head of Export Sales, Pilgrim's Pride Corporation

Jessie Xu Jones, MSCE 2003

Division Head, Transportation Planning and Policy Division, Arkansas Department of Transportation

Jenni Kimpel, BSIE 2006

Director of Engineering and Technology, J.B. Hunt Transport Services, Inc.

Drake McGruder, BSBE 2006, MSE 2012

Associate Director, The Kraft Heinz Company

Gregory Sisti, BSME 2004

MQ-25 Program Integration Manager, Boeing Company

Xiao, Zhichun PhD, MSCSE 2001, PhD 2005

Director, Technology Research Center, Sam's Club

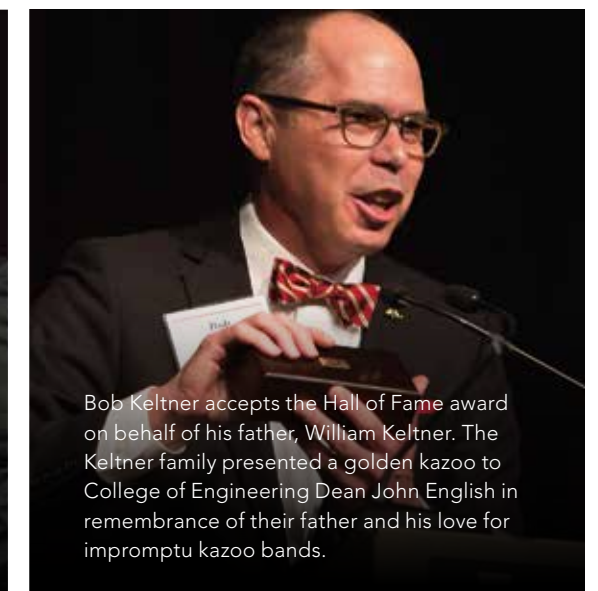


Early Career Award winners

Jessie Xu Jones, Tyson Hall, Eric A DeCuir Jr., Drake McGruder, Gregory Sisti, Zhichun Xiao and Jenni Kimpel.



Kevin Brown accepts his Hall of Fame medal from College of Engineering Dean John English and banquet co-host Charles Zimmerman.



Bob Keltner accepts the Hall of Fame award on behalf of his father, William Keltner. The Keltner family presented a golden kazoo to College of Engineering Dean John English in remembrance of their father and his love for impromptu kazoo bands.



Distinguished Alumni Award winners

Roger Cordes, Robert W. Arvin, Rita Gail Willcoxon, Gregory L. Baltz, John Marshall, Jeremy Stobaugh, Daniel H. Williams and Eugene C. Davis.

Fayetteville Couple's Campaign Gift Creates Scholarships in Engineering, Art

University of Arkansas alumni Robert "Wayne" Jones and his wife, Joanne Jones, of Fayetteville are supporting future engineers and artists with a \$200,000 planned gift. Their contribution counts toward Campaign Arkansas and creates scholarships for the College of Engineering and the School of Art in the J. William Fulbright College of Arts and Sciences.

A graduate fellowship for students majoring in geotechnical or structural engineering will be established with \$150,000 of the couple's gift, and an additional \$50,000 will be used to support scholarships for art students who are studying abroad at the University of Arkansas Rome Center in Italy.

"Wayne and Joanne Jones have been longtime supporters of the Department of Civil Engineering," said Micah Hale, head of the department. "This gift will support the important work of our graduate students in structural and geotechnical engineering for years to come and will be a lasting legacy of the Jones family's dedication to engineering education at the University of Arkansas."

Jeannie Hulen, interim director of the School of Art and Fulbright College's associate dean of fine arts, agreed and said the Joneses have been incredibly generous to the University of Arkansas over the years.

"Joanne has also been a valued faculty member, molding many future artists and educators. After years of service, she continues to give her time and energy to the School of Art. The University of Arkansas Rome Center is an important growth opportunity for our students, and the School of Art is so thankful for the support of Wayne and Joanne Jones."

Robert "Wayne" Jones grew up in Pine Bluff and attended the University of Arkansas at Monticello before transferring to the University of Arkansas to complete his bachelor's degree in civil engineering.

Jones served in the U.S. Army for a year and a half and as an enlisted soldier in the Army Air Defense Command for 13 months in Germany. He then pursued his graduate degree in civil engineering at the university with an emphasis in structural and geotechnical specialties. He began his professional career with the Arkansas Department of Transportation and later spent 39 years with McClelland Consulting Engineers Inc., where he retired in 2014 as vice president, director and corporate secretary.

"The education I received at the University of Arkansas has allowed me to have a great and rewarding engineering career," Jones said. "I'm fortunate to be able to give back to the U of A to help future generations of students become civil engineers."

Jones is a member of the Arkansas Academy of Civil Engineers and noted the group's support of undergraduate scholarships.

"Graduate students don't have access to the same level of available scholarships," he said. "This is why I wanted to support a graduate fellowship for a student in either structural or geotechnical studies."

"As a former undergraduate and graduate student, I know the challenges of attending classes and paying tuition, fees and living expenses," he added.

Joanne Jones also grew up in Pine Bluff, where she and Wayne were high school sweethearts. Jones enrolled in a summer 2-D design class in the university's former Department of Art, now School of Art, when the couple's children were in high school and took classes as a non-traditional student. She completed both her Bachelor of Fine Arts and Master of Fine Arts at the university.

Jones was hired as an instructor of art at the university following the completion of her graduate degree. She held the position for 20 years and taught various studio classes, including photo, drawing and 2-D design before retiring in 2013 as Instructor Emeritus. Her creative work as an artist has been in the mediums of photography, montage and painting.

"I feel fortunate to have attended and taught at the U of A," she said. "For a few years, my son and daughter – Lance and Kim – and I were all enrolled at the university at the same time. They are both U of A graduates and benefited from academic scholarships. Because of our experiences, it was important to give back to students who could use financial assistance to study abroad."

In her role as an instructor, Jones often worked with students who took part in the University of Arkansas Rome Center and noted the impact it made on them.

"I believe the program is very worthwhile, as it allows the students to broaden their understanding of another culture while learning more about the role of art in the world," she said. "They are able to experience some of the major museums and works of art first-hand, beyond illustrations in their art history texts. Students often returned with increased self-confidence and a stronger focus on their own direction with their art."

The Joneses are life members of the Arkansas Alumni Association, members of the Chancellor's Society and are included in Towers of Old Main, a giving society for the university's most generous benefactors. They are also counted as Thoroughbreds for their 18 years of consecutive giving to the university.



Five Ways to Help

Student Support

Your gift will help an undergraduate, graduate or transfer student pay for their education. Scholarships can be based on need and/or merit – you decide.

Faculty Support

Help us attract and retain the best faculty to position our students for success.

Capital Projects

Make an investment in an infrastructure project that will benefit students and faculty for years to come.

Program Support

Choose a specific initiative, like the Engineering Career Awareness Program (ECAP), which helps underrepresented students come to the U of A.

Research Support

Support faculty research into some of the most pressing challenges our world is facing.

**Want to talk about how
you can change lives?
Call us at 479-575-4092!**

CAMPAIGN *Arkansas*

In Memoriam

1940

Alex S. Curtis BSEE'49, Hot Springs Village, November 16, 2017. He served as a pilot in World War II. A farmer, he was also the founder, President and CEO of Farmer's Grain Terminal until retirement.

1950

William E. Shook BSME'50, Fayetteville, May 20, 2017. He was a U.S. Army Air Corps veteran of World War II. He retired from IBM corporation.

Joe A. Kaufman BSEE'51, Hot Springs, Feb. 20, 2017.

Lloyd W. Stephens BSME'51, Fayetteville, May 14, 2017. He was a U.S. Army veteran. He had a 43-year career at Arkansas Western Gas Company, later a subsidiary of Southwestern Energy Company.

Robert P. Tuttle BSEE'51, Cumming, Georgia, Jan. 2017. He was a WWII veteran serving in the south Pacific. He received a Bachelor of Electrical Engineering degree from the University of Arkansas. He received his MBA from Georgia State. His career spanned 45 years working in the aircraft industry. He was instrumental in helping develop the radar systems for several vital military aircraft.

Edmond A. Bollen BSME'52, Baton Rouge, Louisiana, Mar. 7, 2017.

Markley L. Trimble BSCE'54, Hollister, Missouri, February 11, 2017. He served in the U.S. Air Force for 12 years. He was a businessman in Branson, Missouri, active in the creation of such attractions as the Fantastic Caverns in Springfield and the Ozark Auto Show Museum.

Jessie G. Kemp Sr. BSEE'56, Calico Rock, April 24, 2017.

Don Ballard BSChE'57, Houston, Feb. 22, 2017, He worked for Coastal Chemical Company in 1963, and retired in 1997 as Vice President of Marketing.

Jim Edward Brain BSME'57, Springdale, April 2, 2017. He was a U.S. Army veteran and retired professional engineer at Southwestern Bell, where he worked for 43 years.

Richard L. Cunningham BSEE'57, May 17, 2017.

David E. Ratchford BSEE'58, Conway, Arkansas, Jan. 15, 2017.

Jerry R. Strickland BSChE'59, Houston, Feb. 1, 2017, From Texas to California, Jerry worked the oil field service industry. He later discovered a liking for marketing. He became the marketing manager for Polaroid.

Mitchell Selligman III BSEE'59, St. Louis, Oct. 25, 2017, He was retired from Baldwin Company.

1960

Louie M. Heerwagen Jr. BSIE'60, Haltom City, Texas, April 22, 2017. He served in the U.S. Army during the Korean War. He worked as a leader in Manufacturing Management for General Electric, Phillips North America and Selmer Instruments.

Boyce C. Brown BSEE'61, McCroy, Arkansas, May 27, 2017. He was a veteran of the Korean war. He went on to work at NASA for 30 years as an aeronautical engineer.

Lonnie J. Parson BSCE'61, East End, Arkansas, Jan. 12, 2017, He was a professional engineer. In 1988, he retired from the Arkansas State Highway and Transportation Department. He served in the United States Army during the Korean War and was awarded a Bronze star.

William H. Neubert BSEE'62, Carthage, Missouri, Feb. 10, 2017, he taught at San Jose College while earning his master's degree in computer science.

Dale Mize BSME'64, Benton, April 11, 2017. He served in the U.S. Army for two years and went on to become a mechanical engineer.

Richard Berry MSES'67, Longview, Texas, Feb. 23, 2017. He served as professor of engineering, Chairman of the Engineering Department, Dean of Engineering, vice president of Academic Affairs, interim president and vice president emeritus upon retirement at LeTourneau University. Richard was a member of the American Society for Engineering Education, American Society of Mechanical Engineers, and the Evangelical Theological Society.

1970

Phillip F. Kalcich BSEE'71 BSME'77, El Dorado, April 21, 2017. He was a veteran of the U.S. Army and an electrical engineer for TOSCO.

Charles Spencer Palmer MSIE'79, Smithfield, Virginia, April 30, 2017.

J. C. Roe MSE'79, Judsonia, Feb. 16, 2017. He was a teacher and engineer. He worked for Pet Milk Co. and Johnson & Johnson.

1980

Harvey L. Johnson BSIE'80, Camden, May 8, 2017. He was an Engineer at Raytheon.

Lance Alan Fry BSEE'84, Oro Valley, Arizona, May 15, 2017.

Robert Valliant Herring MS'85, Huntley, Illinois, Feb. 10, 2017.

2000

Houston Robert Harper BSIE'05, Edmond, Oklahoma, April 28, 2017. He was an industrial engineer.

2010

Charles K. Rine MSOM'13, Bentonville, Jan. 2, 2017.

Myles Austin McCullough BSME'13, Fayetteville, June 9, 2017. He worked for Central States Manufacturing in Lowell.

Class Notes

1950

Larry G. Stephens BSIE'58, cofounder of MidSouth Engineering, was awarded Engineer of the Year by the Arkansas Society of Professional Engineers.

Bill Keltner BSIE'59, General Manager, Southwestern Bell, was posthumously inducted into the 2018 College of Engineering Hall of Fame.

1960

Carole C. Lacefield BSBA'64 and **William H. Lacefield** BSEE'63 celebrated their 53rd wedding anniversary.

James Terry Wofford BSCE'65, recently became a co-owner and partner in Williams Loving Care, a nonmedical home care company in Montgomery, Alabama. He previously worked as a highway engineer. The company began as a non-medical home care company to provide care to seniors and others with family needs in mind.

1970

Gregory A. Dalke BSME'72 was recognized for over 30 years of service in the government of the United States of America. He is a contracting officer for the Naval Air Systems Command, located at the Naval Air Station in Patuxent River, MD.

Norris N. Johnston BSChE'72 has retired and started Water Wizard Consulting.

John R. Marshall BSEE'76, President, Coastal Partners, received the College of Engineering's Distinguished Alumni Award.

1980

Eugene C. Davis BSChE'80, RFAB-CMP Engineering/Distinguished Member Technical Staff, Texas Instruments, received the College of Engineering's Distinguished Alumni Award.

Gregory L. Baltz Sr. BSAGE'80, Owner and Operator of Running Lake Farms, received the College of Engineering's Distinguished Alumni Award.

Kevin W. Brown BSChE'81, Executive Vice President, LyondellBasell, was inducted into the 2018 College of Engineering Hall of Fame.

Rita G. Willcoxon BSIE'82, retired Global Engineering Leader for Intelligent Control Systems at General Electric, received the College of Engineering's Distinguished Alumni Award.

Gregory A. Mills BSME'82, has been elected as president of Dewberry. Mills has more than 35 years of experience and serves as a senior associate and manager of the Raleigh office's building systems department. He is also the president of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers' Triangle Chapter.

Daniel Williams BSCE'81, President and Chief Executive Officer for Garver, received the College of Engineering's Distinguished Alumni Award.

1990

Roger D. Cordes BSME'91, consultant, received the College of Engineering's Distinguished Alumni Award.

2000

Jeremy Wade Stobaugh BSCSE'00 MBA'10, Senior Vice President of Technology and People, Rausch Coleman Homes, received the College of Engineering's Distinguished Alumni Award.

Marco Javon Barker BSIE'00, was named a 2018 Forty Under 40 by "Utah Business."

2010

Robert W. Arvin MSOM'12, Divisional Vice President for Supply Chain at Walmart, received the College of Engineering's Distinguished Alumni Award.

Elisabeth E. Mathews BSChE'13, has been selected as the inaugural fellow for the Arkansas Pharmacists Association Executive Fellowship in Association Management.

Nicholas Ryan Hauch BSME'18, logistics readiness officer, was commissioned as a second lieutenant in the United States Air Force.

Caroline Fox, EI, BSCE'16 earned the Leadership in Energy and Environmental Design (LEED) LEED Green Associate credential placing her among an elite group of leading professionals in the green building industry. She works for McClelland Consulting Engineers, Inc.

Adam Osweiler, PE, BSCE'10 earned the Leadership in Energy and Environmental Design (LEED) LEED Green Associate credential placing him among an elite group of leading professionals in the green building industry. He works for McClelland Consulting Engineers, Inc.



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Robert Saunders, assistant department head of electrical engineering, captured this image of the Super Blue Blood Moon over Old Main on January 31. The rare photo opportunity came during a total lunar eclipse that coincided with a blue moon. The last one was in 1982, and the next one will be in 2037.