FALL 2025

UAH Magazine

A PUBLICATION OF THE UNIVERSITY OF ALABAMA IN HUNTSVILLE

The Power of Purpose

UAH's College of Education, Sport, and Human Sciences celebrates major milestones

UAH AT A GLANCE | SATURDAY, 11.15.25
SATURDAY, 3.28.26

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Cover Story

With a new name and standout successes, UAH's College of Education, Sport, and Human Sciences continues to excel.

UAH Magazine

UAH Magazine brings together our academic accomplishments, innovative research projects, extracurricular organizations and alumni into one engaging source for all things UAH.

If you would like to receive a hard copy of this issue of UAH Magazine or be added to our mailing list to receive future issues, please contact **omc@uah.edu**.

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UNIVERSITY **ANNOUNCEMENTS**

Dr. Kristy Lee has been named the new Chief Administrative Officer at The University of Alabama in Huntsville (UAH), beginning her role on Aug. 27, 2025. In this newly created position, she oversees key administrative areas — including facilities and operations, human resources, information technology, campus safety, and compliance — and serves as a strategic advisor for key administrative functions across the university.

Dr. Gary Zank, director of the Center for Space Plasma and Aeronomic Research (CSPAR), has been selected to receive the 2025 John Adam Fleming Medal from the American Geophysical Union, the top honor for space physics and related disciplines.

Dr. Xiaomin Chen, assistant professor in the Department of Atmospheric and Earth Science and principal investigator in the Earth System Science Center, received the prestigious Banner I. Miller Award from the American Meteorological Society for groundbreaking research that improves hurricane rapid intensification forecasts, ultimately helping communities prepare and stay safe.

Dr. Helen Lien, the senior development officer for the UAH College of Nursing and the Department of Athletics, was honored by the Alabama League of Nursing with the 2025 Lamplighter Award. The annual Lamplighter Awards Program recognizes outstanding individuals who demonstrate exemplary performance in the nursing profession, or, as in Lien's case, for supporting the nursing profession and for making substantial contributions to the cause of securing a better society.

The University Fitness Center (UFC) will soon undergo a $1.2 million renovation to expand fitness offerings and enhance the health and wellness experience for the Charger community. The project will transform existing spaces, improve infrastructure, and introduce updated branding to meet growing student demand and align with the university's long-term campus vision.

A MESSAGE FROM THE PRESIDENT

Charles L. Karr

Now that we're well into the semester, I am filled with pride and gratitude for the remarkable achievements of the UAH community.

Earlier this year, we welcomed one of the most academically talented freshman classes in our history, boasting an average GPA of 3.97 and an ACT score of 27. These students represent the growing strength of our academic reputation, not only here in Alabama but throughout the region. We continue to see growth, including a nearly 10% increase in Tennessee students thanks to our in-state tuition program, which is opening doors for more families every day. Our undergraduate and graduate enrollment remains strong, particularly in high-impact fields such as business, engineering and nursing, while our research programs have once again ranked among the top 10 nationally in federal funding for the 12th consecutive year. As Huntsville continues to rise as a national hub of innovation, UAH is proud to prepare students to thrive in this dynamic environment.

This fall has been full of energy and momentum across the UAH campus. Family & Friends Weekend 2025 provided a fun and meaningful celebration of Charger spirit, as families returned to campus to spend time with their students and experience the energy of life at UAH and the Rocket City. It was equally special to welcome alumni back and watch them reconnect with a campus that continues to grow and evolve in exciting ways. That same spirit of momentum is also evident in UAH athletics, where strong performances across several sports have energized our community. Our basketball team set new records last year and raised the bar for what's possible, and I know our players and fans are looking forward to the new season approaching. I'm especially excited to see our new athletics branding on the field and on the court – an exciting new chapter for all of our teams.

Recruiting the next generation of Chargers continues to be one of the most rewarding parts of my role. In recent weeks, I've had the privilege of meeting with students and families from across the state of Alabama, including Madison, Huntsville, Athens, Birmingham and Mobile. I've been inspired by the energy and potential I've seen in every classroom and look forward to the bright futures awaiting those who choose UAH.

As we look ahead to the rest of the academic year, I'm excited by the opportunities awaiting us. UAH continues to grow in ways that make a real difference – and it is the creativity, drive and spirit of our community that make our university truly extraordinary. I can't wait to see what we accomplish next.

Go Chargers!

New name, **SAME SHARP FOCUS**

Education, Sport, and Human Sciences reflects college's decade of growth in enriching lives

It's been an especially significant year for the UAH College of Education – as of fall 2025, the College of Education, Sport, and Human Sciences (CESHS). Along with adopting an updated name to recognize its academic evolution, the college celebrated notable program milestones.

"This new name reflects the full scope of who we are today," said Dr. Beth Quick, dean of the college since its founding in 2014. "Over the past 11 years, we've grown from offering just two undergraduate degrees to a broad range of academic programs, including sport and fitness management and child, family and community development."

Today the college includes two academic departments – the Department of Curriculum and Instruction and the Department of Kinesiology – as well as the UAH Early Learning Center, comprising the UAH RISE School, Early Head Start and Head Start programs. It's also home to several special programs, including the Ability Sport Network, Project DIAL (Designing Instruction for Academic Literacies) and the Regional Autism Network (RAN).

All aspects support the college's overarching mission: Equip students to make a positive difference in professional environments ranging from classrooms and clinics to research centers, community organizations and beyond.

"At the heart of everything we do in the college is what we call 'the Power of Purpose,'" Quick said. "Whether through teaching, research or service, we remain dedicated to helping individuals and communities live, learn and perform at their best."

CESHS sets high standards, and its students regularly live up to them. That was the case with a group of graduates from the Master of Science in Applied Behavior Analysis (ABA) program. All graduates who took the Board Certified Behavior Analyst examination for the first time in 2024 passed. That makes UAH one of only 11 out of 192 universities to meet the 100% pass rate for first-time candidates, according to the report released this year by the Behavior Analyst Certification Board.

"The national average pass rate for first-time candidates is only 54% of almost 10,000 first-time test-takers," said Dr. Jennifer Bruzek, assistant professor, Curriculum and Instruction.

The 100% pass rate isn't the program's only major accomplishment. Bruzek and fellow ABA instructor Dr. Laura Senn, clinical assistant professor, pursued recognition through the Association for Behavior Analysis International's (ABAI) Tiered Model of Education. They recently achieved Tier 2A.

"This recognition is particularly meaningful because it represents an important step toward full accreditation for our program," Bruzek said. "ABAI, one of only two accrediting bodies for behavior analysis programs, and the oldest in the field, sets rigorous standards that guide the growth and quality of programs worldwide."

Board certified behavior analysts assess and manage human behavior for a wide range of clients, including, but not limited to, individuals with autism, traumatic brain injuries or any type of intellectual or developmental disability as well as children in the foster care system and geriatric patients. Organizational behavior management, a branch of behavior analysis that deals with performance management and systems, can benefit workplaces, too.

"We look at behavior," Bruzek said, "from the perspective of what's happening in the environment to either maintain, increase or decrease behavior in some way so that people are moving towards living the lives they want to live."

It's one of the many ways that the UAH College of Education, Sport, and Human Sciences provides the power for people to discover their purpose. ■

▲ Dr. Jeremy Elliott, associate dean and associate professor, UAH College of Education, Sport, and Human Sciences, teaches a sport communications class in Wilson Hall. A requirement for sport and fitness management majors, this course explores the various ways communication is used to further the mission of a variety of sport organizations and is designed for students who may want to explore careers in sports media, including media relations, public relations and content development.

"Whether through teaching, research or service, we remain dedicated to helping individuals and communities live, learn and perform at their best."

UAH Center for Cybersecurity Research and Education celebrates 10th anniversary

The UAH Center for Cybersecurity Research and Education (CCRE) celebrated its 10th anniversary in 2025, a milestone recognized by UAH President Charles L. Karr, who presented Dr. Tommy Morris, the founding director of the Center, with a CCRE 10 years of excellence coin.

"This is a critical area of great importance in the community where we reside," Karr said in welcoming guests to the event. "Tommy Morris has done a tremendous job as the CCRE founder and in continuing to move it forward."

Morris spearheaded the creation of the UAH Bachelor of Science in Cybersecurity Engineering degree program, designed to prepare students for challenging cybersecurity roles. "It really is about CCRE, and the CCRE is all about people," Morris noted in receiving the 10-year recognition.

The CCRE offers an interdisciplinary approach to defending cyber physical systems, embedded weapon systems and supervisory control and data acquisition (SCADA) networks, as well as data and computer operating systems, from adversarial attacks. In addition to providing educational opportunities such as camps and scholarships, the CCRE also engages in cutting-edge research on a wide variety of cybersecurity-related topics, including identity management, supply chain security, intrusion detection, vulnerability analysis, medical device security and digital forensics.

"CCRE is one of the nation's largest academic cybersecurity centers," said Dr. Robert Lindquist, the UAH vice president for research and economic

development, at the ceremony. "CCRE has been transformed into a major cybersecurity hub with over 50 full-time and 20 part-time staff members, and more than 100 student workers, all anticipating their new home in the Bevill Center."

UAH received Stage II approval from the University of Alabama (UA) System Board of Trustees for the renovation of the Bevill Center. The project will provide 45,000 square feet of space for a new interdisciplinary research and academic facility, meeting the growing needs for a wide variety of cybersecurity-related disciplines. The Alabama State Legislature voted to appropriate $34.4 million of state supplemental funds toward the project. The Board's Stage II approval encompasses the revised project scope and budget and allows UAH to hire an owner's representative firm. Stage I approval was granted in 2023.

"We anticipate space for computing and cybersecurity classrooms, faculty offices and faculty research labs as well as space for external companies partnered with UAH on research," Morris said. "The entire CCRE will be in one building with modern informal meeting and study spaces. That gives UAH cybersecurity students an amazing opportunity to go to class, conduct cybersecurity research work and study with their friends – all in one building."

"The CCRE has achieved significant milestones and become a national leader in cybersecurity research, education, outreach and workforce development," Lindquist added. "CCRE attained over $10 million in external contract expenditures in the 2023, 2024 and 2025 fiscal years, ranking fifth among all UAH research centers. CCRE's efforts have led to UAH's continued designation as a National Center of Academic Excellence in Cyber Research and Cyber Defense, which is a true testament to the center's advanced cybersecurity research." ■

"CCRE has been transformed into a major cybersecurity hub with over 50 full-time and 20 part-time staff members, and more than 100 student workers, all anticipating their new home in the Bevill Center."

SUMMER SNAPSHOTS:

UAH students discover passport to growth during study abroad

At UAH, study abroad programs open doors to new cultures, perspectives and unforgettable experiences. Each semester, students embark on transformative journeys through a variety of exchange and affiliate programs, gaining insights that enrich their academic and personal lives while preparing them to thrive in a global community. Stories and snapshots from summer 2025 study-abroad programs show UAH students made the most of horizon-expanding opportunities available through the UAH Office of Study Abroad in the Office of International Services.

"I loved getting to immerse myself in Tokyo like a local," said Jill O'Linger, a sophomore with a double major in management and marketing. "Since I was there for over a month, I experienced what daily life as a commuter was like, and it was unlike anything I'd ever known before. I loved how easy it was to hop on a train and be at an amazing new place within minutes."

Karlie Sikorski, an information systems graduate student with specialization in UX design and human factors, collected memories to cherish in stops across Europe, including at the Netherlands American Cemetery for soldiers from World War II.

"Our professor told us how the soldiers became friends and even part of the families that lived there, so it was devastating for the locals when the soldiers died in battle defending them. Each family in the village has adopted a soldier's grave. They care for it, and that duty is passed down through the generations." ■

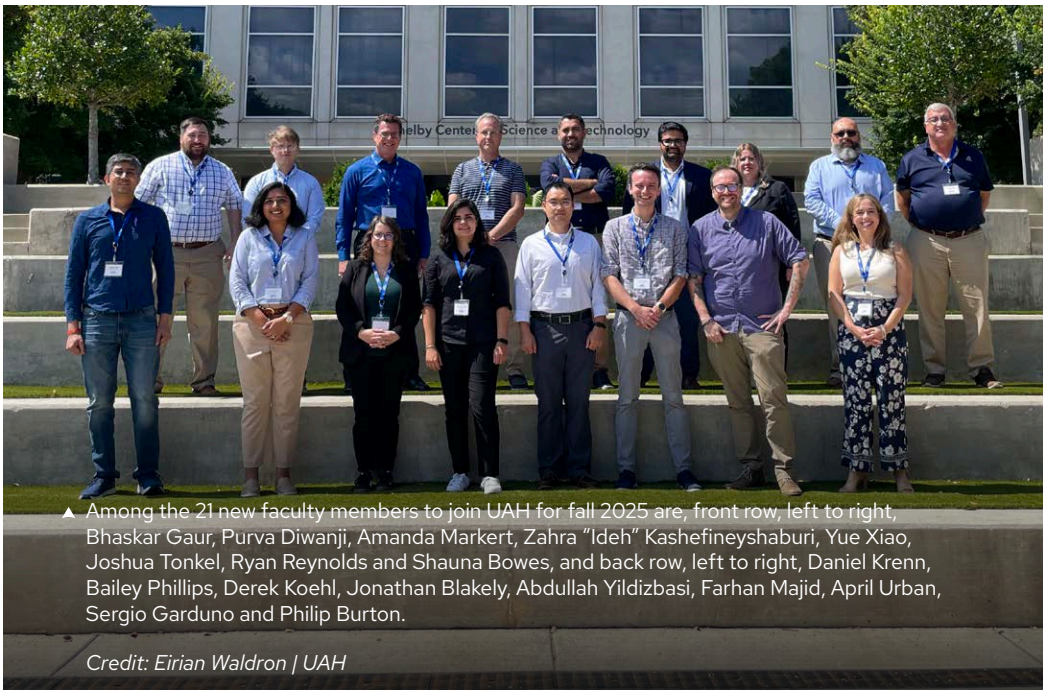
▶ Left: Sophomore Jill O'Linger visited Tokyo. Right: Karlie Sikorski, a graduate student, toured Europe.

UAH welcomes **21 NEW FACULTY MEMBERS** for 2025-26

"We're delighted to bring 21 exceptional new faculty members into the UAH family," said Provost Dr. David Puleo, welcoming them for the 2025-26 year.

"These talented educators, researchers and scholars will enrich their students' educational experience while pushing the boundaries of knowledge and innovation in their fields. Their contributions will strengthen our university and create lasting benefits for the wider community."

They are listed by college with department, title, specialty and beginning semester:



▲ Among the 21 new faculty members to join UAH for fall 2025 are, front row, left to right, Bhaskar Gaur, Purva Diwanji, Amanda Markert, Zahra "Ideh" Kashefineyshaburi, Yue Xiao, Joshua Tonkel, Ryan Reynolds and Shauna Bowes, and back row, left to right, Daniel Krenn, Bailey Phillips, Derek Koehl, Jonathan Blakely, Abdullah Yildizbasi, Farhan Majid, April Urban, Sergio Garduno and Philip Burton.

Credit: Eirian Waldron | UAH

Arts, Humanities, and Social Sciences

- **Shauna Bowes**, psychology, assistant professor, human factors or clinical/counseling psychology, fall 2025
- **L. Sergio Garduno**, sociology, assistant professor, criminology and quantitative methods, fall 2025
- **Zahra "Ideh" Kashefineyshaburi**; art, art history and design; assistant professor; graphic design; fall 2025
- **Gray Kochhar-Lindgren**; art, art history and design; Visiting Eminent Scholar in the Humanities and Visiting Professor of Philosophy; humanities; fall 2025
- **Derek Koehl**, interdisciplinary studies program, lecturer, spring 2026
- **Daniel Krenn**, psychology, clinical assistant professor, psychology, fall 2025
- **Matthew Bailey Phillips**, film and media arts, lecturer, film and video production, fall 2025
- **Ryan Reynolds**, history, assistant professor, intelligence and security history, fall 2025
- **Joshua Tonkel**, history, lecturer, U.S. 19th/early 20th century history, fall 2025

Business

- **Valentina Iscaro**, management, clinical associate professor, management/entrepreneurship, fall 2025
- **M. Farhan Majid**, economics, assistant professor, economics, fall 2025
- **Abdullah Yildizbasi**, management science, clinical associate professor, management science, fall 2025

Engineering

- **Jonathan Blakely**, electrical and computer engineering, assistant professor, electrical engineering, fall 2025
- **Bhaskar Gaur**, electrical and computer engineering, assistant professor, electrical engineering, fall 2025
- **Yue Xiao**, mechanical and aerospace engineering, assistant professor, mechanical and aerospace engineering/plasma science, fall 2025

Salmon Library

- **April Urban**, lecturer and librarian II, October 2024

Nursing

- **Yeow Chye Ng**, nursing, professor and associate dean of graduate programs, fall 2025

Science

- **Philip Burton**, mathematics, lecturer, mathematics, fall 2025
- **Purva Diwanji**, engineering technology, clinical assistant professor, engineering technology, fall 2025
- **Amanda Markert**, atmospheric and earth science, lecturer, atmospheric and earth science – remote sensing, Geographic Information System, fall 2025
- **Kimberly Xu**, computer science, clinical assistant professor, cyber teaching, fall 2025 ■

SPACE, STRATEGY AND THE FUTURE:

Distinguished Lecture Series brings big ideas to UAH

UAH recently hosted two nationally recognized leaders as part of its Distinguished Lecture Series, connecting Huntsville audiences with insights from space exploration and global security. NASA astronaut Dr. Frank Rubio and retired Lt. Gen. H.R. McMaster shared firsthand experiences that highlighted critical challenges and opportunities facing the nation and the world.

Dr. Frank Rubio shares record-breaking mission

Dr. Frank Rubio, NASA astronaut and U.S. Army lieutenant colonel., shared stories from his 371-day mission aboard the International Space Station — the longest single-duration spaceflight by a U.S. astronaut. Originally planned for 180 days, Rubio's mission more than doubled after their Soyuz spacecraft was struck by a micrometeorite, which caused the spacecraft to lose coolant.

"We weren't confident that we could return safely in that spacecraft, and so we ended up extending by another six months," Rubio explained. Rubio completed nearly 6,000 orbits around Earth, traveling over 157 million miles and conducting three spacewalks totaling 21 hours and 24 minutes.

While at UAH, Rubio met with students for a special event, open to the entire UAH community. During the forum, Rubio took an inspiring look at the evolving world of space, including what's next for astronauts, exploration and space education and programs.

▼ Rubio met with students during a special afternoon event on campus.

Lt. Gen. H.R. McMaster offers sharp insight on global threats

Retired Lt. Gen. H.R. McMaster, former National Security Advisor, addressed key foreign policy challenges, focusing on the "axis of aggression" — Russia, China, and Iran. McMaster highlighted China's military buildup under Xi Jinping and warned of a high risk of aggressive action against Taiwan.

He noted China's development of first-strike capabilities aimed at limiting U.S. responses and estimated a 90% chance of conflict over Taiwan in the next five to 10 years. ■

Distinguished LECTURE SERIES

THE UNIVERSITY OF ALABAMA IN HUNTSVILLE

About the Distinguished Lecture Series

The UAH Distinguished Lecture Series brings leading experts from across the nation to Huntsville to spark bold conversations in national defense, intelligence, space, tech and more. These events strengthen collaboration between UAH, Redstone Arsenal, Cummings Research Park and our wider community — connecting ideas to impact.

Want to get involved? The Distinguished Lecture Series is made possible solely through the generous support of sponsors. As a sponsor, you'll help bring national conversations to our doorstep — while connecting your organization to a powerful network of innovators and changemakers.

Visit **www.uah.edu/president/uah-distinguished-lecture-series** for more information.

Invest in ideas. Connect leaders. Shape the future.

Breakthrough study sheds light on one of cosmology's biggest questions

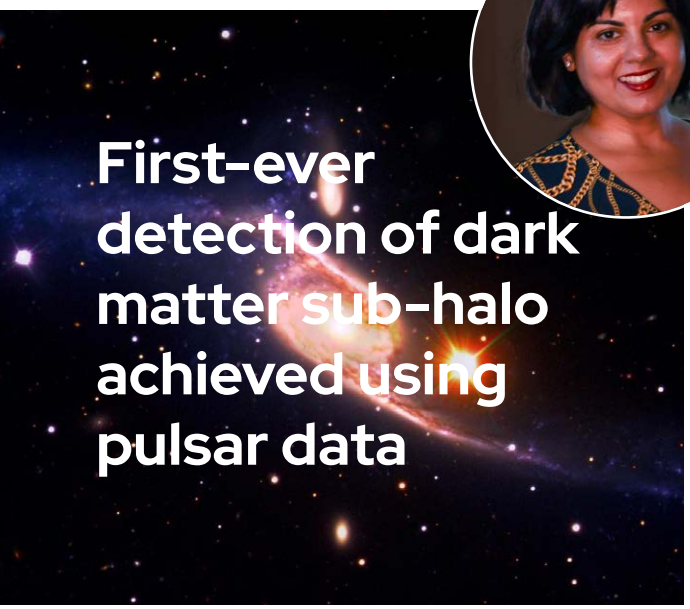
Dr. Massimiliano "Max" Bonamente, a professor of physics and astronomy, along with Dr. David Spence and international colleagues, have solved one of three major outstanding puzzles in cosmology: the "missing baryon problem," a discrepancy between the amount of baryonic matter detected from shortly after the Big Bang when compared with recent epochs.

Baryons are subatomic particles, most commonly protons and neutrons, that comprise the bulk of visible matter in the universe. The researchers used X-ray radiation from quasars to determine the "missing" particles reside in the warm-hot intergalactic medium, or WHIM, a state of matter characterized by low density and high temperatures.

"This is the result of over 10 years of work," Bonamente says. "With three major problems in modern cosmology – missing baryons, identification of dark matter and identification of dark energy – it's case closed on the first."

The effort comprised a systematic search for the absorption lines of highly ionized oxygen atoms in the spectra of 51 quasars. These show up as "dark lines" in the X-ray spectrum, created when specific wavelengths are absorbed by atoms in the gas. By learning the properties of these absorption lines, like their strength and velocity, astronomers can learn about the physical conditions and amount of the absorbing gas. ■

SUBATOMIC SLEUTHS



First-ever detection of dark matter sub-halo achieved using pulsar data

Dr. Sukanya Chakrabarti, the Pei-Ling Chan Endowed Chair in the College of Science, and her team published a paper that for the first time uses binary and solitary pulsars to characterize properties of a dark matter sub-halo in our own galaxy. Sub-halos are smaller clumps of dark matter that reside within a larger dark matter halo – regions of invisible matter surrounding galaxies and galaxy clusters known only through their gravitational effects.

"These dark matter sub-halos are the lynchpin of dark matter models, and we now think we have a means of finding them," the researcher notes. "Our determination of the mass of this dark matter sub-halo is much more precise than any previous method."

The work builds on earlier efforts, helping to determine how much of this mysterious substance is in the Milky Way and where it is located. Chakrabarti and her colleagues have achieved a significant step toward at last illuminating one of the great mysteries of the universe.

"I think the next step is to increase our samples of precise accelerometers so that we can get more detections – that are also more precise – of dark matter sub-halos," she says. "That will ultimately enable us to clearly discriminate between dark matter models and determine the nature of dark matter, which is one of the outstanding problems in astronomy and has been for the last century." ■

COSMIC CAMPERS

UAH hosts International Space Weather Camp

UAH welcomed students from across the Southeastern U.S. and Germany to the International Space Weather Camp (ISWC), a two-week immersive program exploring space weather science and its global impacts. The U.S. portion of the event was hosted by the UAH Center for Space Plasma and Aeronomic Research (CSPAR) and featured hands-on research projects on topics such as space plasma simulations, artificial intelligence tools for modeling electromagnetic waves, turbulence in space environment and cosmic ray modulation in the heliosphere.

The ISWC was launched in 2011 for students to learn about space physics through lectures, hands-on projects, experiments and excursions. Seventeen students, including eight from Germany and nine from the southeastern U.S., gathered on the UAH campus to take part in more than 20 expert-led lectures and four in-depth group projects organized by CSPAR. The program is part of the Future Technologies & Enabling Plasma Processes (FTPP) initiative, a National Science Foundation (NSF)-funded cooperative agreement led by Dr. Gary Zank, director of CSPAR and FTPP principal investigator.

"The International Space Weather Camp 2025 was not just an academic program, it was an immersive, interdisciplinary experience that brought together students and researchers from around the world to explore the frontiers of heliophysics and space weather," says Ashutosh Giri, a Ph.D. student in the Department of Space Science at UAH. "Over several weeks, we engaged in high-level lectures from leading scientists, collaborated on team-based research projects and applied advanced analytical techniques to real spacecraft data."

The camp is a partnership between FTPP at UAH and the German Aerospace Center (DLR) at the University of Rostock, taking advantage of historical ties between Huntsville and the state of Mecklenburg-Vorpommern in Germany in the development of rockets, missiles and eventually manned space flight. The primary initiators of the ISWC were Zank and former Vice President of Research at UAH Dr. John Horack, together with colleagues at the DLR in Neustrelitz, Dr. Wolfgang Mett, Dr. Holger Wandsleb and Dr. Wolfgang Schareck, Rektor of the University of Rostock.

International Space Weather Camp course topics included cosmic ray particle transport theory, plasma physics, solar physics, heliospheric physics, computer simulations for modeling and understanding local space weather, as well as its impact on the Earth's atmosphere, satellites and space vehicles. ■

Researcher gains **$95K USDA grant** to help control Japanese beetle

Dr. Carrie Deans, an assistant professor in the Department of Biological Sciences, won a $94,986 United States Department of Agriculture (USDA) grant to help combat Japanese beetles, an invasive pest that causes approximately $450 million in damages every year to private lawns and golf courses alone. The researcher will investigate the effectiveness of potential biocontrol agents, such as microsporidian parasites. The study is slated to run through June 2026.

The project will document the distribution of *Ovavesicula popilliae*, a microsporidian pathogen that infects grubs and can reduce grub survival and adult fecundity by 50%, as well as the Winsome fly, *Istocheta aldrichi*, which parasitizes adult Japanese beetles. A microsporidian pathogen is a fungal parasite that is studied across multiple biological levels, from its highly reduced genome and cellular structure, to its interactions with hosts and the role they play within ecosystems.

The Japanese beetle is well established throughout most of the eastern and central United States and has also spread to certain areas and portions of states west of the Mississippi River. The effort will also form a stakeholder network and advisory board comprised of representatives from city park boards, golf course superintendents and commodity groups to assist with establishing sampling sites, soliciting feedback and disseminating findings. ■

Missing the mark

Air quality data from megacities not accurate for U.S. urban centers

Dr. Lee Tiszenkel, an alumnus working in the Earth System Science Center, and Dr. Shanhu Lee in the Department of Atmospheric and Earth Sciences, published a paper funded by the National Science Foundation that demonstrates for the first time that using data gathered on atmospheric particles from Chinese megacities to characterize air quality in U.S. urban centers leads to significant inaccuracies. The key to understanding the critical differences from one city to another came through extensive field research in Houston, Texas.

Research in Chinese megacities show that ultrafine particles could be traced back almost entirely to human activity like traffic, cooking, industry or heating. In the United States, however, the existence of green spaces in and surrounding urban areas means that emissions from trees and other emerging air pollutants emitted from urban human activities form particles by a different mechanism than was found in urban China.

The study focused on atmospheric ultrafine particles with sizes smaller than 100 nanometers, where one nanometer equals one billionth of a meter. Even particles this small can have negative health effects, because they can be diffused into the lungs even more easily than larger particles. Volatile organic compounds emitted by plants and other sources, such as cleaning products and deodorants, affect air quality and human health. ■

GET SMART

UAH, UA partnership aims to meld manufacturers, advanced tech

▲ Members of the UAH SMART team are, left to right, Dr. Ana Wooley, assistant professor, Department of Industrial & Systems Engineering and Engineering Management (ISEEM); Dr. Nicholas Loyd, clinical associate professor, ISEEM; Dr. Vineetha Menon, associate professor, Department of Computer Science; Dr. Howard Chen, assistant professor, ISEEM; team leader Dr. Judith Schneider, professor, Department of Mechanical and Aerospace Engineering; adjunct, Department of Chemical and Materials Engineering, and director, Materials Science Program, and Dr. Cheng Chen, assistant professor, ISEEM.

UAH and The University of Alabama (UA) have partnered in a new initiative: Smart Manufacturing using AI-based Revolutionary Technologies (SMART). UA, the lead partner, and UAH recently received a planning grant for the program from the National Science Foundation (NSF) Industry University Cooperative Research Center (IUCRC).

SMART aims to help manufacturers incorporate artificial intelligence (AI), machine learning (ML) and digital twins (DT) into their production processes. The center will provide a collaborative environment for addressing common, pre-competitive needs of companies to be determined during the planning meeting. By analyzing technological challenges, research teams will create shareable solutions that will benefit companies and the economy.

At UAH, Dr. Judith Schneider – professor, Department of Mechanical and Aerospace Engineering; adjunct, Department of Chemical and Materials Engineering, and director, Materials Science Program – leads the team of five faculty members from the departments of Industrial & Systems Engineering and Engineering Management, and Computer Science. Leading the UA team is Dr. Hwan-Sik Yoon, associate professor, Department of Mechanical Engineering, with members from that department.

In the wake of AI/ML and DT advancements, some industries are flourishing, but much of the manufacturing sector has lagged. While many manufacturers acknowledge the vast potential of these technologies, they lack effective methods to integrate them into their organizational strategy, operations and processes.

"What we're facing with advanced manufacturing is how to incorporate all the new tools coming down the pipeline," Schneider said. "It can be hard for companies to implement the new tools because they're not trained to use them. While these companies lack the training, universities are currently training their future employees to fill that gap."

The SMART center will work with companies to collect data from sensors and cameras during representative manufacturing processes and use the information to develop and integrate AI solutions to improve productivity, product quality, factory sustainability and workforce safety.

The general solutions developed by the center will be shared across the industry with the goal of strengthening the global competitiveness of U.S. manufacturing by advancing technological innovation and cultivating a skilled workforce through targeted training programs.

The SMART center is seeking companies to join this effort. Those interested should contact Schneider at jas0094@uah.edu. ■

Blue. Bold. Together.

Chargers unite at UAH Family & Friends Weekend 2025

UAH wrapped up Family & Friends Weekend 2025 in September, welcoming students, alumni, parents and guests from near and far for four days of events celebrating Charger pride and campus community.

Guests enjoyed a wide range of events across campus and Huntsville, from athletic celebrations and student showcases to open houses, community service and local culture.

"We combined what used to be separate Family and Alumni weekends into one exciting, unified experience," said Dr. Ronnie Hebert, vice president for student affairs and dean of students at UAH.

The weekend kicked off with Thursday's popular Biergarten at the U.S. Space & Rocket Center (USSRC), followed by Fried Chicken Friday – a UAH lunch tradition reimagined as a family dinner hosted by the UAH Alumni Association.

Saturday featured the 5K Color Run and Family Fun Day, as well as a Service Saturday opportunity led by the Serving, Organizing, Advocating and Reflecting (SOAR) student organization. That evening, guests were treated to Cocktails and Cosmos, a private UAH-only planetarium show at the USSRC, as well as the Athletics Hall of Fame Induction Ceremony.

The weekend closed Sunday with a cheerful "See you Soon" Breakfast, giving families one last chance to enjoy the Charger spirit before heading home.

With student performances, department open houses, academic showcases and plenty of memory-making moments, Family & Friends Weekend 2025 offered something for every age and interest – and set a new standard for what campus connection looks like at UAH.

"We wanted to give our families the best of both worlds – time with the Charger community on campus, as well as the chance to explore what makes Huntsville such a special place," said Hebert. ■

Sounds of connection:

UAH presents Constellation Concerts, Haunted Piano, Rocket City Reed Day, Holiday Jazz and more

From the world of Ravel to a Halloween techno treat to a celebration of all things reed, the UAH Department of Music, Theatre and Film offers a wide variety of musical events aimed at forging stronger connections across campus and with the larger community. All are invited to join the fun.

"Engaging with the Huntsville community, specifically with local schools and students, lies at the core of our 2025-2026 concert season," said Dr. Jack Hontz, assistant professor and director of bands.

"Whether it's the second annual Rocket City Reed Day, the inaugural 'Her Art in Song' festival, the eleventh annual Keyboard Festival, or the resurrection of the popular Honor Band, our concerts are designed to welcome Huntsville community members into the UAH musical fabric. We're so excited to both build new relationships and strengthen existing partnerships with our upcoming season."

Highlights of fall 2025 include the following:

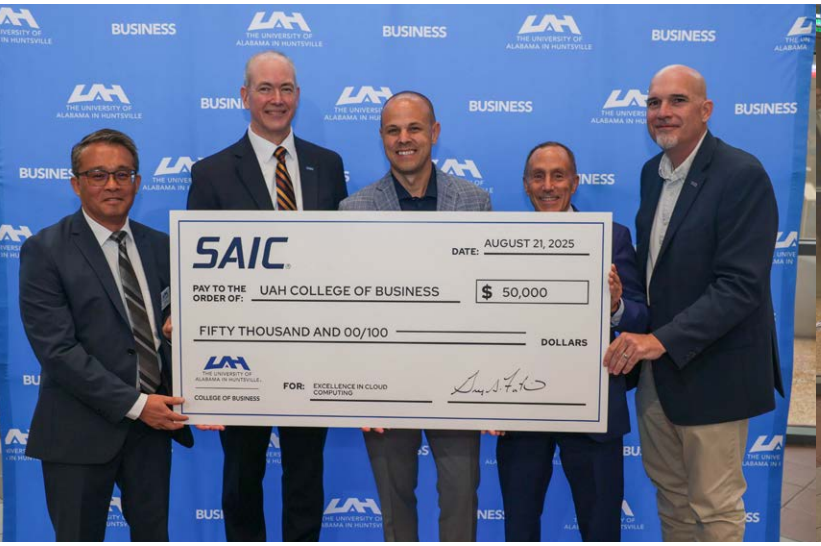
- **Sept. 18** – Constellation Concert with guest artist Michael Seregow, piano, in "A Changing World: Maurice Ravel and His Contemporaries."
- **Oct. 5** – Faculty recital by Ariana Arcu, cello, with Lisa Wiggins, violin, and Ron Guthrie, piano.
- **Oct. 16** – UAH Music Ensembles Showcase with the UAH Chamber and Concert Choirs, Wind Ensemble and Jazz Ensemble.
- **Oct. 25** – Constellation Concert with contemporary chamber music ensemble Rocket City New Music in "Are You Afraid of the Dark?"
- **Oct. 31** – The Haunted Piano Experience, a family-friendly but still scary lineup of holographic pianists presented by UAH Charger Friends and featuring the UAH Zombie Choir.
- **Nov. 7-8** – Rocket City Reed Day, open to woodwind players from across the region and featuring the Rocket City Reed Day Artist Showcase concert.
- **Dec. 9** – Holiday Jazz extravaganza.

And here's a breath of spring 2026 air:

- **Jan. 23-24** – Honor Band Festival.
- **Feb. 20** – Album release party for the Joshua Couts Jazz Quintet.
- **March** – Maya Osuga's "Her Art and Song" festival.
- **April** – The Keyboard Festival with Melody Ng.

Expect to hear about more musical adventures when 2026 arrives.

Find more details about UAH music programs and performances at uah.edu/music/events. ■



▲ Celebrating SAIC's $50,000 donation to the UAH College of Business to create the UAH Cloud Center of Excellence are, left to right, Dr. Wai Yin Mok, chair, Department of Information Systems, Supply Chain, and Analytics, College of Business; Business Dean Dr. Jason Greene; Senior Vice President Greg Fortier, SAIC Army Business Group; UAH Provost Dr. David Puleo, and Director of Innovation Dr. Colby Jones, SAIC Chief Technology Office. The check-presentation ceremony happened Aug. 21, 2025, at the UAH Business Administration Building.

▲ Celebrating the new Keel Point Professorship in Family Wealth at UAH are, left to right, UAH Provost Dr. David Puleo, Keel Point Professor in Family Wealth Dr. Frank Mullins, Keel Point CEO Robert Mayes, Keel Point President Michael Perry, UAH President Dr. Charles Karr, and College of Business Dean Dr. Jason Greene. UAH and Keel Point representatives held a check presentation ceremony for the $100,000 gift on July 9, 2025, at the Business Administration Building on the UAH campus.

NEW BUSINESS ADVENTURES

Partnerships with Keel Point, SAIC provide fresh opportunities for students, companies, community

The UAH College of Business (COB) began two collaborations in 2025 that will offer advanced opportunities in wealth management and cloud computing.

Keel Point, an independent wealth advisory firm, donated $100,000 to create the Keel Point Professorship in Family Wealth. Former faculty member Dr. Frank Mullins returned to UAH to fill this position.

Science Applications International Corporation (SAIC), a COB partner for 15 years, made a new $50,000 donation to launch the UAH Cloud Center of Excellence. SAIC is a leading Fortune 500 mission integrator that provides technology and innovation solutions for the U.S. government across defense, space, civilian and intelligence markets.

Keel Point CEO Robert C. Mayes, a UAH alumnus, said that he and his colleagues are honored to collaborate with Mullins and the college:

"I'm very fortunate to work among 80 men and women who have an incredible heart and a desire to care for clients. We serve over 1,200 families, mainly throughout the southeast United States, and 30 or more of those families require family office services. We have to help these clients be able to harness their wealth to live with peace and purpose, and that, to us, is total alignment with the research and innovation that Dr. Mullins brings to UAH."

The Cloud Center of Excellence, said COB Dean Dr. Jason Greene, "will directly enhance our business curriculum, provide access to industry-recognized certifications for students, and expand professional development opportunities for faculty."

Courses include foundational cloud concepts, architecting, developing, operations and data analytics.

"The partnership between SAIC and UAH represents our strong commitment to the region and building the cyber workforce of the future," said SAIC Army Business Group Senior Vice President Greg Fortier.

"This type of investment is something our CEO, Toni Townes-Whitley, talks about all the time – to whom much is given, much is required. We have certainly been given a lot in this community, both collectively and individually, and we want to give back. We think this is one of the pieces of what is required of us to ensure an advanced talent pool is available in the region and the nation." ■

'THIS IS A BIG DEAL'

UAH ATO chapter has top national winner plus runner-up two years in a row

Alpha Tau Omega (ATO) fraternity keeps shining its national spotlight on UAH's Theta Pi chapter. Brother Cadis Ammons won the 2025 Thomas Arkle Clark (TAC) Award as the most outstanding senior candidate for an undergraduate degree among 125-plus chapters across the U.S.

Fueling the excitement, Theta Pi's Mark Porter was named one of six 2025 TAC Fellows, runners-up for the award.

The same thing happened last year: Theta Pi's Grant Hershbine was named 2024 TAC winner with Garrett Willingham as a fellow.

"This is a big deal," said UAH Vice President for Student Affairs and Dean of Students Dr. Ronnie Hebert. "This is our second consecutive year having UAH represented as both the honoree and a runner-up for one of ATO's most prestigious awards. I can't think of another university that could say the same. It's another testament to what a great group of ATOs we have on our campus."

The TAC Award honors "excellence in scholarship, leadership, service, and the personal qualities of character, integrity, and responsibility."

Ammons was the College of Engineering's top scholar when he graduated summa cum laude with a 4.0 grade point average in December 2024. Before receiving his bachelor's in mechanical engineering, he'd already started his master's through the UAH Joint Undergraduate Master's Program.

Working with NASA was Ammons' goal when he chose UAH. Joining a fraternity was not. Friendships changed his mind.

"At orientation I met Noah Gray, one of the OLs (orientation leaders). We bonded over 'Star Wars,' something I never thought a guy in a fraternity would want to talk about. That was the start of me realizing that there was more to ATO than the stereotypical fraternity."

As an ATO, Ammons grew as a leader through opportunities to serve his chapter, university and community. He faced stressful challenges with the help of his brothers and found a faith that enriched his life during an ATO Encounter retreat.

"I learned there that Jesus loves me most, and that my brothers are there for me, and that I have been and always will be loved. That was a pretty pivotal spot, and it was ATO that got me to that." ■

BIG ROCKETS, **BIGGER IMPACT:**

UAH alumnus John Blevins receives Samuel J. Heyman Service to America Medal, premier award for career federal employees

Alumnus Dr. John Blevins received the Samuel J. Heyman Service to America Medal, or "Sammie," in 2025, considered the highest honor for career federal employees. Currently Chief Engineer for the NASA Space Launch System (SLS) program, Blevins earned an M.S. degree in 1993 and Ph.D. in 1998 in mechanical and aerospace engineering from UAH. The alumnus has served the U.S. space program for 26 years since coming to work at Marshall Space Flight Center in Huntsville in 1999.

The SLS is the first launch vehicle since the Saturn V capable of sending humans to the Moon, paving the way for astronauts to return to the lunar surface for the first time since the Apollo era.

"It is an incredible honor to be recognized with a Sammie," Blevins said. "This honor is truly about the incredible engineering teams that I get to lead across the country that are committed to achieving the ambitious space exploration goals of our great nation."

Prior to his current assignment, Blevins served as the SLS Deputy Chief Engineer, as well as Technical Assistant in the Structural Design and Analysis Division in the NASA Spacecraft & Vehicle Systems Department where he was the aerodynamics sub-discipline lead for SLS.

"I'd like to congratulate John Blevins at Marshall on being named a 2025 Service to America Medal honoree," said Janet Petro, NASA acting administrator, in making the announcement. "John, as chief engineer for the Space Launch System rocket, played a key role in the Artemis I mission and is helping us prepare for Artemis II. These awards recognize the highest levels of public service, and John's work reflects the dedication and excellence that define our NASA team."

"UAH graduate school provided a wonderful foundation for an aerospace engineering career," Blevins said. "My years as a full-time engineering graduate student provided not only the technical foundation to do analysis and lead test programs, but also provided an excellent understanding of engineering program life cycles and how to build coalitions that are necessary to make big things happen. I am in debt to UAH, and particularly the Propulsion Research Center, for creating an atmosphere that fostered rigorous engineering analysis, ingenuity and teamwork." ■

HONK IF YOU LOVE UAH!

New UAH car tag revs Charger pride, community connections while boosting scholarship initiative

UAH's new vehicle license plate is turning heads – and turning Charger pride into scholarship power

Available to Alabama drivers beginning January 1, 2026, the dynamic design features the new UAH Athletics logo with its fierce Charger Blue stallion, a blue Huntsville skyline and gray mountains rising into the distance.

But this plate is more than just stylish – it supports a new scholarship initiative for students who have graduated from Space Camp at the U.S. Space & Rocket Center.

"The skyline design represents UAH's strong ties to the community of Huntsville," said Kelly Myers, director of Alumni Relations and Special Events and executive director of the UAH Alumni Association, which promotes the UAH license plate effort.

"The majority of our students choose to remain in this community after graduation" she said, "and that's what's so beautiful about it. This design signifies growth; it shows their UAH pride, and it benefits scholarships for UAH students. What more could you ask for?"

Nearly 2,500 students graduate from Space Camp each year, notes Dr. Michael Poll, vice provost for enrollment management at UAH. The new scholarship program gives UAH a chance to attract those high-achieving students to campus.

Space Camp graduates who qualify for admission to UAH will receive a renewable annual scholarship – $1,000 for in-state students, $2,000 for out-of-state – if they decide to become a Charger. Alabama license plate funds will be used only for in-state scholarships.

For more information on how you can catch a new UAH license plate, contact the Office of Alumni Relations at 256-824-ALUM or email alumni@uah.edu, or visit the Alabama Department of Revenue website.

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Dr. Martin Luther King, Jr.

Leadership Breakfast

UAH will host its annual Dr. Martin Luther King, Jr. Leadership Breakfast: Shaping the Healthcare Community of the Future.

Wednesday, January 14, 2026
7:30 a.m.
UAH Campus

This annual event focuses on the leadership principles set forth by Dr. King and showcases leaders in our community who are making our futures brighter.