



WE BUILD TEAMS THAT WIN IN LOUISIANA, FOR THE WORLD



POWERING SOLUTIONS FOR LOUISIANA

\$438 MILLION* LSU SYSTEMWIDE RECORD IN TOTAL RESEARCH ACTIVITY ADDS

\$1.3 BILLION

TO THE LOUISIANA ECONOMY

*Based on FY23 research activity



Letter From the President

Dear LSU Community,

Over the past year, our collective teamwork at LSU has led to unprecedented success. It is a testament to our dedication to excellence and collaboration, and I am honored to update you on our progress as a university. Across our eight campuses, with more than 60,000 students, we continue to set new benchmarks in research, innovation, and economic contribution to make a profound impact on Louisiana's future.

Together, we have driven \$488 million in research activity in the past year, a 14 percent increase from the year before for the LSU family, surpassing the university's aspirational goal of growing its collaborative research enterprise 10 percent year-to-year. This is research that is innovating the state's critical industries and bolstering the economy by protecting and creating jobs, training the current and future workforce, and returning Louisiana's investment in the university several times over.

In the following pages, you will discover the remarkable accomplishments of our determined teams of researchers and scholars at each campus. From pioneering advancements in agriculture, biomedicine, coastal studies, defense, and energy to remarkable triumphs in athletics and beyond, we embody a culture of shared achievement here. At the heart of our success lies our unwavering commitment to our students and the broader community — a commitment that is reinforced by your steadfast support.

I take immense pride working alongside each of you to ensure that our wealth of knowledge, research breakthroughs, and innovative spirit reaches every corner of our incredible state and serves as an example of what's possible for the larger world. As you review the following pages, I hope you will celebrate not only your collective successes but also the role you played in helping LSU achieve such great heights.

Sincerely,

William F. Tate IV



July 13, 2023

LSU Health Nursing was awarded \$2.6 million from the Health Resources and Services Administration (HRSA) to improve primary care, mental health, and maternal care to underrepresented populations in rural, urban, tribal, and underserved areas across the state. The project will establish new partnerships, provide tuition support to a diverse group of students, and enhance the curriculum.

August 21,

LSU Health New

Orleans' School

of Allied Health

ASAHP Award

for Institutional

Excellence and

Interprofessional

and Collaborative

Health Care from

the Association of

Schools Advancing

Health Professions

(ASAHP).

Education (IPE)

Innovation in

received the 2023

Professions

2023

September 19, 2023

LSU received its official designation as a National Center of Academic Excellence in Cyber Operations at the National Security Agency's annual cybersecurity education colloquium.

September 27, 2023

The LSU National Center for Biomedical Research and Academy for Counter-Terrorist Education, or LSU NCBRT/ACE, was awarded a \$22 million grant from the U.S. Department of Homeland Security. deliver emergency preparedness training to emergency responders at state, local, tribal, and territorial levels at no cost to participants.

October 23, 2023

LSU beat out nearly 400 schools and regions to secure a Tech Hubs designation for Louisiana from the U.S. Economic Development Administration.

October 30, 2023

LSUA, LSU Health Shreveport, and LSU Health New Orleans announced partnership to boost medical careers in Central Louisiana.

November 14, 2023

LSU Health New Orleans celebrated 90 years of nursing excellence.

November 30, 2023

Pennington Biomedical **Research Center** and Vanderbilt University Medical Center received \$13.8 million for five years of research funding to study the ideal "dose" of behavioral interventions to treat childhood obesity in rural and minority communities across Louisiana and Tennessee

December 11, 2023

LSU Health Shreveport opened the Center for Medical Education.



March 7, 2024

Dr. Steve Nelson was named Chancellor of LSU Health New Orleans.

March 12, 2024

LSU Health New Orleans' ALS Clinic recognized as an ALS Center of Excellence.

March 14, 2024

February 27,

LSU and President

2024

Tate hosted

House, the

representatives

from the White

National Science

ExxonMobil, and

to showcase the

the largest-ever

awarded through

the NSF Engines program.

partnership's grant,

Baker Hughes

LSU-led FUEL

Foundation, Shell,

Pennington Biomedical was named a spoke in both the Customer Experience and Investor Catalyst Hubs of ARPA-H, a nationwide health innovation network headquartered in the Department of Health and Human Services in Washington, D.C.

March 15, 2024

LSU broke ground on the Our Lady of the Lake Health Interdisciplinary Science Building.

April 2, 2024

LSU of Alexandria, Shreveport, and Eunice were honored as military friendly schools.

April 20, 2024

The LSU gymnastics team won the program's first national championship.

July 26, 2024

LSUE broke ground on the new Bengals baseball stadium.

2024

January 14, 2024

The LSU Tiger Girls won Hip Hop National Championship.



THANK YOU, GOVERNOR LANDRY AND THE LOUISIANA STATE LEGISLATURE, FOR YOUR CONTINUED SUPPORT.

Funding from the Louisiana State Legislature this year supported graduate assistantships, campus safety and security improvements across the LSU System, faculty startup packages at Pennington Biomedical, equipment upgrades at LSU AgCenter and LSU Health New Orleans, LSU Health Shreveport Center for Medical Education, mandated cost increases system-wide, deferred maintenance of infrastructure renovations and repairs, and over \$180 million toward LSU construction projects across the state.

Funding by campus includes:

LSU Flagship

- Our Lady of the Lake Health Interdisciplinary Science Building
- Strategic Capital Plan Deferred Maintenance for Infrastructure, Renovations, and Streets
- Student Learning Commons

LSU Shreveport

- Building Exterior Walls and Bridge Replacement
- HPE Renovation for Student Wellness Facility and Campus Repairs

LSU of Alexandria

- Student Success Center
- Downtown Health Services Center

LSU Eunice

- Manuel Hall Exterior Wall/Roof Repair
- Athletic Complex Facility

LSU Health New Orleans

- Medical Education Building
- Laboratory Renovation Phase I

LSU Health Shreveport

- Gross Anatomy Lab Expansion and Modernization
- Center for Medical Education & Wellness

LSU AgCenter

- Animal and Food Science Facilities Renovations and Modernization Phase II
- Food Innovation Center

Pennington Biomedical Research Center

- Replacement of Underground Chilled Water and Hot Water Piping
- Over \$180 Million Toward LSU Construction Projects Across the State







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STRATEGIC FRAMEWORK AIMS FOR INCREASED NATIONAL PROMINENCE

DRIVE NATIONAL PROMINENCE

INDIVIDUAL DISTINCTION The effort of the individual or the unit. Each unit will rive to be the best among its peers.

TEAMS

in a multidisciplinary, crossmission effort supporting areas most critical to Louisiana's future.

ENGAGE THROUGH THE MISSION

STUDENT SUCCESS Improve the educational experience, increasing progression and preparing students for success in future endeavors. SCHOLARSHIP & DISCOVERY Expand research while targeting the Pentagon Priorities.

ENGAGEMENT Share knowledge, ideas, and resources with more people in service to the state.

BUILD THE FOUNDATION

TALENT Assemble the bes faculty, staff, and students.

TOOLS Supply the talent with the best facilities, equipment, and libraries. **CULTURE** Set the expectation that every interaction contributes to the scholarly culture.

Mechanical Engineering Assistant Professor Christopher Marvel receiving ASM International's 2023 Bronze Medal Award In July, President Tate released *Scholarship First: The Strategic Framework*, a guide for strategic plan development at all LSU institutions. This is the first time in LSU history that a system-wide planning document has been developed. Leadership at each campus and center will establish mileposts to measure future success against goals outlined within the framework document. Through collective efforts, these goals will help drive LSU's national prominence by empowering individuals and teams who, in turn, advance discoveries and fuel the state's economic growth and prosperity.

The framework outlines the values, vision, and mission of "The Statewide University," comprising all of LSU's programs, campuses, and entities across Louisiana, within the context of President Tate's Scholarship First Agenda and Pentagon Priorities of agriculture, biomedical/health, coast, defense, and energy. Throughout 2024-2025, each campus will develop a strategic plan that calls forth their strengths and abilities to make advancements across the state that will, in time, benefit the whole of humankind.



FUELING THE FUTURE OF ENERGY IN LOUISIANA, FOR THE WORLD

The National Science Foundation announced in January that a statewide team led by LSU was awarded a transformative NSF Engines grant to help create jobs in the energy sector, develop innovative solutions to energy challenges, and train the world's energy workforce.

Future Use of Energy in Louisiana (FUEL)

Future Use of Energy in Louisiana is a team of universities, community and technical colleges, state agencies, and industry and capital partners with an aligned vision for positioning the state to lead the global energy expansion.

"Leading the FUEL team and being selected for this transformational grant affirms what we already knew — that LSU is one of the nation's premier research universities, poised to change the lives of the people of Louisiana and the world," LSU President William F. Tate IV said. "By teaming up with our partners across the state in education, industry, and government, we are leveraging the intellectual capital of our state's best and brightest to make a difference for the energy industry and for the people of every parish in Louisiana."



FUEL's Mission

The largest and most competitive grant ever awarded by the NSF — up to \$160 million over the next 10 years — will support FUEL's mission to address emerging challenges in:

- Carbon capture, transport, and storage
- Hydrogen technology
- Utilization of carbon dioxide for low-carbon fuels and essential carbon-based products
- Water use and management
- Sustainable manufacturing
- Policy development

The focus of the grant is the energy transition and decarbonization of Louisiana's industrial corridor. Louisiana is a world leader in energy expertise and solutions, with more than 250,000 people working in the energy, chemical, and petrochemical industries.

The grant will allow FUEL partners to:

- advance the nation's capacity for energy innovation through research and development that will impact everyday lives;
- foster workforce development to protect current jobs and create new ones;
- accelerate technology commercialization that will transform ideas into products for the marketplace.

State Support and Economic Impact

Louisiana Economic Development is supporting the initiative with an additional \$67.5 million over the next decade. These funds will help build a world-class team to convert groundbreaking research into practical, impactful solutions, amplifying the economic benefits statewide.

This grant is more than an investment in energy; it is an investment in Louisiana's future, ensuring that our state remains at the forefront of global energy innovation.

BUILDING THE NATION'S BEST CYBERSECURITY PROGRAM

Under President William F. Tate IV's leadership, LSU has made serious strides toward becoming the foremost cybersecurity program in the nation, including becoming one of 20 universities nationwide designated as a National Center of Academic Excellence in Cyber Operations by the National Security Agency, which has enabled and supported a cascade of additional cybersecurity wins.

Protecting Small Businesses

LSU was recently chosen by the National Security Agency as the first university in the country to create and pilot a Cybersecurity Clinic to help Louisiana small businesses — which are often used by cyber criminals as stepping-stones to hack and attack larger organizations — prevent, detect, and respond to cyberattacks at no cost to the business. LSU Associate Professor of Computer Science and Cybersecurity Clinic Director Aisha Ali-Gombe is partnering with Adam McCloskey, director of the Louisiana Small Business Development Center, along with cybersecurity students and faculty in engineering, business, and law to develop a comprehensive list of services to protect these small businesses. Konda Mason, leader of Jubilee Justice, a nonprofit that supports a network of Black farmers developing a more climate-friendly way of growing rice, has already connected with the Cybersecurity Clinic. "We're interested in working with the LSU Cybersecurity Clinic because anything happening to Jubilee Justice would just be devastating," Mason said. "After all, this is the world we live in, and we've got to know it."

Students Defending Universities Across Louisiana

Louisiana universities are now receiving vital cyber protection through LSU's groundbreaking Security Operations Center (SOC), which is backed by a \$7.5 million state legislative investment. With the LSU Shreveport and Baton Rouge SOCs operational, this collaborative effort, involving industry leaders TekStream and Splunk, trains students from various disciplines to manage cyber threats, serves as a blueprint for up to 40 Louisiana institutions to enhance their cybersecurity defenses, and helps the state save resources. Additionally, LSU's Chief Information Officer Craig Woolley was selected by Splunk for The Champion award, which celebrates executives who are

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committed to innovation, teamwork, and results. Woolley was the only nominee working in higher education. LSU's innovative model is setting a national standard and aims to address the critical shortage of cyber talent nationwide.

Educating Cyber Talent for National Security

Federal funding for LSU's Scholarship for Service CyberCorps program was increased an additional \$600,000 by the National Science Foundation to grow a bigger, better cyber workforce for Louisiana and the U.S. The program — which focuses on teaching students specialized cybersecurity skills, including memory forensics, malware analysis, and machine learning — is one of the largest in the country, having already secured \$3.7 million for the students and the state. All students receive free tuition and scholarships in return for some government service after graduation. Six SFS students have already graduated from LSU with bachelor's, master's, and doctoral degrees, and most of them are now working for federal agencies and national labs. LSU also doubled its Scholarship for Student cohort of students from 12 to 25. The surge in program enrollment mirrors the rising student interest in cybersecurity, marking a ten-fold increase in three years in the cybersecurity concentration within the LSU Division of Computer Science & Engineering.



Securing Research Funding for Frontier Projects

In the past year, LSU secured more than \$13 million in research funding from national security, intelligence, law enforcement, and defense agencies to tackle cyber and security problems, including \$1 million from the U.S. Department of Homeland Security through the Criminal Investigations and Network Analysis Center for two separate research projects involving memory forensics. Memory forensics is a frontier field in digital investigations to recover elusive evidence of criminal activity on computers and digital devices. The LSU team's growing collaborations and partnerships with state and federal agencies and leading security and defense organizations are partly based on its expert memory forensics capabilities and driven by the increasing need around the world to gather digital evidence to fight online crime and international cyberattacks and terrorism. Additionally, LSU's recent designation as a Center of Academic Excellence in Cyber Operations by the National Security Agency was contingent on its cybersecurity team's ability to teach hands-on memory forensics.

LSU and NATO Team Up on Cyber Defense Training

LSU cybersecurity researcher Elias Bou-Harb, associate professor of computer science, and his team of students are working with NATO Allied Command Transformation to develop innovative training scenarios to help strengthen NATO cyber defense capabilities during NATO's annual Cyber Coalition training exercise, which involves about 1,200 participants from the 32 member nations. In the fall, Bou-Harb's team will stage a hypothetical healthcare cyber assault in a NATO cyber range in Estonia to enhance collaboration and cyber preparedness across the NATO countries, ensuring NATO can respond to cyberattacks regardless of individual members' expertise and resources. Securing healthcare infrastructure is critical, since a cyberattack could have far-reaching consequences for both civilian and military patients, hospitals, emergency response capabilities, and national security.

FROM INCOMING FRESHMEN TO GRADUATING SENIORS,

LSU CAMPUSES REACH NEW HEIGHTS IN ENROLLMENT & STUDENT SUCCESS

LSU's family of campuses across Louisiana continued to attract and retain highly accomplished students in impressive and, in many cases, record numbers during the 2023-24 school year. In the fall, overall enrollment surpassed 60,000 students across the system.





RECORD-SETTING FRESHMAN CLASS

In fall 2023, LSU celebrated continued academic excellence through a record-setting incoming freshman class of 7,494 students, up from the previous record of 7,367 in fall 2022.

It's also LSU's most accomplished freshman class ever, with a record-high average ACT superscore of 26.5 and a record-high average GPA of 3.82.

"Our ability to recruit and retain students of this academic caliber is due to the quality and talent of our faculty and staff," LSU President William F. Tate IV said. "While other universities are struggling with recruiting, an LSU education remains a competitive driver that keeps Louisiana talent here at home while attracting intellectually gifted students from around the nation."



"Over the last few years, we have completely changed the way we meet our students' needs ... and the results are proving that it works."

> Chancellor Dr. Nancee Sorenson LSU Eunice.

BOOMING ENROLLMENT

Bucking national trends, LSU's campuses reported healthy increases, records, and milestones in overall enrollment for 2023-24.

At LSU Shreveport, Chancellor Robert Smith reflected on the university's success in crossing the 10,000-student mark in enrollment for the first time in the school's history.

"This is the result of hard work on behalf of everyone on campus as LSUS continues to focus on the success of our students, recruiting students, and working to retain them through graduation," he said. "This is also the result of LSUS developing programs that are meeting student interests as well as contemporary workforce needs."

In the 2023-24 school year:

- LSU's flagship campus in Baton Rouge reported a record-setting total fall enrollment of 39,419, ahead of the previous record of 37,354 in fall 2022.
- LSU Shreveport saw a record spring enrollment of 10,214, topping the previous LSUS record of 9,955 in fall 2020 and crossing the 10,000-student mark for the first time.
- LSU Health Shreveport welcomed a record 1,045 students for the 2023-24 school year, boosted by three new degree programs designed to address nursing shortages.
- LSU of Alexandria reached its enrollment goal of 5,000 students at LSUA well ahead of its 2025 timeline. As of the fall 2023 semester, the university proudly served 5,104 students, further cementing its status as the fastest-growing public university in Louisiana.
- LSU Eunice saw a record enrollment of 3,623 for the fall semester, a 5.6% increase over the previous semester record, set in fall 2010.

RECORD-SIZED GRADUATING CLASSES

LSU campuses wrapped up the 2023-24 school year by awarding record numbers of degrees to students from across Louisiana, the United States, and the world.

Spring 2024

- LSU awarded a record 4,949 degrees during the university's 313th commencement exercises, topping the previous record of 4,563 in spring 2022.
- LSU Shreveport conferred degrees to a recordbreaking 1,355 students, topping the institution's previous record of 1,344 students in the summer of 2021 and topping 1,000 graduates for the 13th consecutive year.
- LSU of Alexandria celebrated the commencement of 438 graduates, LSUA's largest graduating class to date.
- LSU Eunice awarded 470 degrees and certificates, smashing the spring 2023 record of 259. LSUE also set a new school high mark for honor graduates.

"Graduating from college reflects the sacrifices, dedication, and hard work you have invested in your future. We celebrate those accomplishments and extend our heartfelt thanks to everyone who supported you in achieving this incredible goal."

Chancellor Paul Coreil, PhD LSUA May commencement

New Heights in Enrollment & Student Success | 17

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ACADEMIC

LSU's Peter Kelly named 2024 Udall Scholar

LSU's Harper Doerr named **2024 Schwarzman Scholar**, the first LSU recipient of this graduate fellowship

Dr. Laura T. Hetzler, LSU Health New Orleans Vice Chair of the Department of Otolaryngology-Head and Neck Surgery and Director of the Division of Facial Plastic and Reconstructive Surgery, honored with the **2023 Rosalind Franklin Society Award in Science**

LSU's Tiernan Dautle and Peter Vallet named 2024 Astronaut Scholars

LSU's Rachael Coates, Iyana Oliviel, and Abigail Randolph named **2024 National Science Foundation Graduate Research Fellowship Program awardees**

LSU's Chen Wang, Corina Barbalata, Jimmy Lawrence, Kevin Smiley, and Hai Lin received **National Science Foundation CAREER Awards**

LSUS professor Alexander Mikaberidze won **"Golden Bee" literary prize** for his Polish translation of *The Napoleonic Wars: A Global History*

LSU's Sophie Warny, Joseph Giaime, Edward Laws, and LSU Health Shreveport's Christopher Kevil named **fellows of the American Association for the Advancement of Science**

LSU Law Professor Lisa Avalos selected for **Fulbright U.S. Scholar Program award**

ALL STARS

Pennington Biomedical's Dr. Leanne Redman received the **2023 TOPS Research Achievement Award** from The Obesity Society

LSU instructor Raquel Robvais named a **2024 American Council of** Learned Societies fellow

LSU's Kam-Biu Liu received the Lifetime Achievement Award from the American Association of Geographers

LSU Health New Orleans' Dr. Demetrius Porche selected for **Friends of the National Institute of Nursing Research Ambassador Cohort**

LSU Professor Emeritus Robin McCarley and former LSU Associate Professor of Mechanical Engineering Kevin Kelly elected as **fellows of the National Academy of Inventors**

LSU Professor Kermit Murray named senior member of National Academy of Inventors

LSU Health New Orleans' Dr. Angela Johnson appointed **board chair** of the American College of Physicians

LSU postdoctoral researcher Beatriz Elizaga Navascués won **Bronstein Prize in Loop Quantum Gravity**

Seven LSU Health Shreveport faculty received **Healthcare Research All-Star Awards from Avant-Garde Health** for research in their respective areas: Dr. Cherie-Ann Nathan, Dr. Brian Willis, Dr. Ameya Asarkar, Dr. Alexander Gomelsky, Dr. Tarek Helmy, Dr. Nazih Khater, and Dr. John Pang





IMPROVING STEM CELL DELIVERY

Mandi Lopez, director of the LSU School of Veterinary Medicine's Laboratory for Equine and Comparative Orthopedic Research, developed a new syringe that improves the delivery of adult stem cells to treat tendon injuries. The syringe stores and delivers stem cells directly, reducing contamination and cell loss during transfer and transport. The innovation aims to enhance the effectiveness of stem cell therapy, speeding up recovery for both humans and animals.



SAVING THE LOWER MISSISSIPPI RIVER DELTA

Researchers at LSU and Tulane University were awarded \$22 million by the National Academies of Sciences, Engineering, and Medicine to lead a 15-member consortium that will chart a new course for the future of the fragile Lower Mississippi River Delta. The Mississippi River Delta Transition Initiative, or MissDelta, as the consortium is known, will include a team of 38 investigators working with the National Academies' Gulf Research Program. The group will begin engaging stakeholders this year as they work to project the evolution of the disappearing delta through the year 2100 and assess how interventions would lead to different and better outcomes for that area.

\$16 MILLION FOR NEW CONSTRUCTION BUILDING

LSU alumnus Art Favre committed \$15 million in support of the LSU Construction & Advanced Manufacturing Building. His leadership generosity catalyzed momentum toward the \$75 million fundraising target for the new building, envisioned as a \$107 million, three-floor complex that will expand space for labs and research faculty – cornerstones of the Scholarship First Agenda. Favre was one of the first graduates of LSU's construction management program and co-founded Performance Contractors, now a leading full-service industrial construction company.

SAVING U.S. CATTLE INDUSTRY \$1 BILLION ANNUALLY

LSU researcher Shafiqul Chowdhury, a professor of veterinary medicine, has developed a new vaccine against bovine respiratory disease and related illnesses that kill around 8 million calves each year and cost the U.S. cattle industry more than \$1 billion. With Chowdhury's vaccine, there is no chance for the virus to spread and circulate in the cattle population. Chowdhury took bovine herpes virus type 1 and genetically modified it to provide the protective proteins of other bovine respiratory viruses.



PROVIDING BETTER DATA FROM THE GULF COAST

LSU received \$5 million from the National Oceanic and Atmospheric Administration (NOAA) to install up to eight high-frequency radar systems along the Louisiana coastline. Spearheaded by LSU Department of Oceanography & Coastal Sciences Professor Kevin Xu and LSU Department of Geology & Geophysics Professor Sam Bentley, this radar system will allow near-real-time monitoring of the speed and direction of ocean surface currents.





TRANSFORMING OIL SPILL MANAGEMENT

LSU Chemical Engineering Associate Professor Bhuvnesh Bharti and his former graduate student Jin Gyun Lee received a patent for their new technology using lignin nanoparticles to provide an eco-friendly method for oil spill cleanup. Currently, silicone-based surface-active agents, or surfactants, are commercially used as "oil herders." Their design and poor biodegradability, however, have raised concerns about their release into the environment and health impacts. Bharti's technology combines lignin — a complex organic polymer found in wood and plants — with alcohol to form a solution that shrinks the film of spilled oil into a small region where it can be more easily removed.

\$5 MILLION FOR LEARNING COMMONS

Roger and Jill Jenkins' \$5 million leadership gift in support of the new LSU Library Learning Commons is the largest gift to the project to date. Roger is the current chair of the LSU Foundation Board of Directors. Elite spaces that reflect LSU's Scholarship First mindset are requisite to attracting and retaining elite students and faculty. The LSU Library Learning Commons will relocate LSU's library – the largest public research library in Louisiana – to a welcoming and inspiring destination, forming a new center of campus, and will be competitive with the libraries of fellow Research 1-designated universities. The projected 198,000-square-foot space will empower innovation in research and learning by providing next-generation services, technologies, and collections within a vibrant, inclusive, and adaptable space.



DRIVING WORKFORCE

LSUA is at the forefront of aligning academic programs with the evolving demands of the workforce. The university combines advanced technology, careerfocused education, and collaboration with community partners to drive innovation, stimulate economic growth, and create positive social impact across the state. To directly address critical workforce shortages, LSUA has partnered with multiple universities and organizations to launch programs that provide top-tier educational experiences to prepare graduates for immediate success.

Recognizing the importance of technology in the modern workplace, LSUA has significantly expanded its technological capabilities. Students can now access cutting-edge tools like virtual reality (VR), drones, cybersecurity technologies, and a makerspace equipped with 3D printers and laser-cutting machines. The investment in technology modernizes the learning environment and ensures students are well-prepared for the technological demands of their future careers.



EXCELLENCE IN TEACHER TRAINING

LSUA is making a significant impact on K-12 teacher training in Central Louisiana, shaping the future of education in the region. Three hundred future educators participated in the 5th Cenla Educators Rising Convention. The university's School of Education has earned national recognition for excellence in science and reading instruction, further solidifying its reputation as a top-tier educator preparation provider. LSUA's commitment to educational excellence is also demonstrated by its inclusion among 38 educator prep providers recognized nationally for their outstanding programs.

100% PASS RATE ON CERTIFICATION TESTS

100% of LSUA School of Nursing fall 2023 graduates passed the National Council Licensure Examination (NCLEX). This accomplishment marks the second time in six years that LSUA has seen all students in a cohort pass the NCLEX on their first attempt, underscoring the school's commitment to excellence in nursing education and preparation. In addition, 100% of Radiologic Technology graduates passed the American Registry of Radiologic Technologists (ARRT) certification exam. The program has also accepted the largest class in its history.

ENHANCED PATHWAYS FOR STUDENTS

LSUA is forging robust pathways for students to transition into professional degrees, effectively serving as a pipeline to LSU.

- Through a partnership with LSU Health New Orleans, LSUA launched the first dental hygiene program in Central Louisiana, a two-year Bachelor of Science curriculum that graduates students from LSU Health New Orleans School of Dentistry.
- An agreement between LSUA and LSU streamlines the path to engineering careers, allowing students to complete pre-engineering coursework and an Associate of Science at LSUA before transferring to LSU for their Bachelor of Science in various engineering fields.
- A new partnership with the LSU School of Veterinary Medicine further enhances this pipeline, offering an early admission pathway for LSUA graduates specializing in rural and agricultural veterinary practices aimed at bolstering expertise in food animal and production medicine sectors.
- In a move to enhance health care accessibility and quality in Louisiana, LSU introduced the innovative Interdisciplinary Pre-Med Program (IPP) to bolster local health care through partnerships with LSU Health Sciences Centers in New Orleans and Shreveport. This pioneering initiative combines coursework from various disciplines to provide a comprehensive pre-med education, preparing students for medical school and diverse health care careers. The IPP is designed to address regional health care needs by equipping students with a broad skill set and fostering a strong foundation in medical sciences, ultimately enhancing health care services in Central Louisiana. The partnership is also aimed at creating a robust pipeline of medical professionals, ensuring LSUA graduates with qualifying MCAT scores earn guaranteed admissions interviews at either of the LSU medical schools in New Orleans and Shreveport.

ATHLETIC ACHIEVEMENTS

LSUA celebrated a remarkable year of athletic achievements, marked by significant victories and academic excellence. The Generals clinched Conference Championships in women's soccer, men's basketball, and softball. In addition, LSUA athletes recorded the highest GPAs in the program's history. Multiple athletes from women's tennis, softball, and men's basketball were named All-Americans. LSUA coaches earned top recognition in the Red River Athletic Conference (RRAC). Billy Perkins was named RRAC Coach of the Year for women's basketball, while Dimario Jack, in his first year as the Generals' head coach, earned the same honor for men's basketball.









BASEBALL WINS 8TH NATIONAL CHAMPIONSHIP

LSU Eunice Baseball continued its championship dynasty, winning its 8th NJCAA National Championship. The Bengals defeated Brunswick CC 9-3, capping off a 56-8 record. The eight National Titles are the most in NJCAA Division II history and the second most in NJCAA Baseball. A homegrown team, with 31 of its 36 members hailing from the Bayou State, saw Ruston's Dawson Willis named the World Series Most Valuable Player alongside All-Tournament Team members Blake Lobell (Springfield), Teddy Johnson (Kenner), Weston Fulk, and Liam Watt. NJCAA and ABCA Hall of Fame head coach Jeff Willis captured his 1,000th career win, all at LSUE, during the championship season, becoming one of the youngest and quickest to ever reach the milestone.

FEDERAL FUNDING FOR STEAM CENTER

LSU Eunice was the recipient of \$3.25 million in federal funding earmarked for the upcoming STEAM Innovation Center. The support is the latest investment into the game-changing upgrades for the current Science Building and the largest commitment either publicly or privately. The STEAM Innovation Center is the renovation and reimagining of the first building erected on the campus in 1967. It will serve as a hub for academic and economic change in the area, providing a first-class facility with the classroom and laboratory space needed in today's academic environment.

'EARN WHILE YOU LEARN' RESPIRATORY THERAPY PROGRAM

LSU Eunice has partnered with Ochsner Lafayette General and Acadiana Workforce Solutions for a Respiratory Therapy Apprenticeship Customized Training Program. The joint effort affords students a unique chance to "earn while they learn" through a paid apprenticeship at Ochsner Lafayette General in the Respiratory Therapy department while pursuing an Associate of Science in Respiratory Care at LSUE. As the need for qualified respiratory therapists increases following the COVID-19 pandemic, this alliance seeks to help lower-income students accomplish their goals by providing a work/study environment in a growing health care field.



ACADEMIC MILESTONES ACHIEVED

LSU Eunice accomplished several milestones in the academic arena during the 2023-24 year. LSUE completed its 10-year SACSCOC accreditation renewal this fall, while also earning continuing accreditation for Diagnostic Medical Sonography (Commission on Accreditation of Allied Health Education Programs) and Nursing (Accreditation Commission for Education in Nursing), as well as a Fire and Emergency Services Higher Education (FESHE) recognition for our Fire and Emergency Services department. Individually, Assistant Professor Rachel Andrus was awarded Recreator of the Year by the Louisiana Association of Health, Physical Education, Recreation, and Dance (LAHPERD).

NATIONALLY RECOGNIZED PROGRAM

The LSU Eunice Fire and Emergency Services program has received the Fire and Emergency Services Higher Education (FESHE) Recognition by the United States Fire Administration. LSUE is one of only seven institutions nationwide that carry the FESHE Recognition certificate at the associate degree level. The honor is an acknowledgement that a collegiate emergency services degree program meets the minimum standards of excellence established by FESHE professional development committees and the National Fire Academy.



RECORD ENROLLMENT

LSUS achieved a historic milestone this spring, surpassing 10,000 students for the first time with a total enrollment of 10,214. This record-breaking increase, driven by growth in both undergraduate and graduate programs, reflects LSUS's commitment to student success and its effective response to contemporary workforce needs. Graduate enrollment alone reached 7,756, the highest in the state. The university's innovative programs and support systems continue to attract and retain a diverse student body despite national enrollment challenges.





HUNGER-FREE CAMPUS DESIGNATION

LSUS was recognized as a hunger-free campus by the Louisiana Board of Regents, meeting the criteria outlined in Act 719. This designation highlights LSUS's efforts to combat student hunger through initiatives such as a charitable food pantry, supported by the Red River Gardening Club. The designation enables LSUS to pursue further funding for resources like refrigeration and kitchen equipment. Additionally, the SHARE Center at LSUS offers comprehensive support addressing students' basic needs, enhancing their overall well-being and academic success.

ATHLETICS EXCELLENCE

The Pilots' baseball team showcased their dominance by securing the Red River Athletic Conference (RRAC) regular season championship for the third consecutive year. In basketball, the men's team made it to the NAIA Sweet 16, while the women's team clinched both the RRAC regular season and tournament championships. Adding to the accolades, men's basketball coach Kyle Blankenship was honored with the prestigious Jimmy Collins Award from the Allstate Sugar Bowl, recognizing his outstanding contributions and leadership. The LSU Shreveport Bass Fishing team recorded its best-ever finish for an entire season as the Pilots logged a sixth-place standing in the Bass Pro Shops School of the Year presented by Abu Garcia. It's the third straight year that LSUS has put together its best season ever, finishing No. 15 in 2022-23 and No. 20 in 2021-22



LARGEST-EVER GRADUATING CLASS

LSUS celebrated its largest-ever graduating class with 1,355 degrees conferred. This milestone surpasses the previous record set in 2021. The event highlights LSUS's commitment to academic excellence and its diverse student body, with graduates hailing from 49 states and 29 countries.



TOP RANKING IN ECONOMIC MOBILITY INDEX

LSUS ranked the highest in the state and among the nation's best in the second annual Economic Mobility Index, which measures how effectively institutions help low-income students improve their socioeconomic level. LSUS earned Tier 1 status, meaning it ranked in the top 20 percent of the more than 1,300 colleges evaluated. The report was released by the organization Third Way, a national think tank that believes higher education is critical to securing a middle-class lifestyle.





NEW SAFER, NON-ADDICTIVE, NON-TOXIC PAINKILLER

LSU Health New Orleans researchers have developed a new, non-addictive, non-toxic painkiller that offers the hope of pain relief while also addressing the opioid crisis through safer, more effective pain management solutions for people worldwide. Dr. Nicolas Bazan, Boyd Professor and director of the Neuroscience Center of Excellence, led the team that discovered this innovative therapeutic. Painful conditions affect up to 27% of adults worldwide, including over 51 million adults in the U.S. Existing pain treatments such as opioids, acetaminophen, and NSAIDs pose risks of addiction and toxicity with overuse.





DR. RAHN BAILEY SELECTED FOR PRESTIGIOUS NATIONAL AWARD

The American Psychiatric Association (APA) Foundation selected Rahn Bailey, MD, DLFAPA, ACP, professor and chair of psychiatry at LSU Health New Orleans School of Medicine, as the recipient of the 2024 Solomon Carter Fuller Award. The award honors a Black citizen who has pioneered in an area that has significantly improved the quality of life for Black people. His work has been seminal in assisting communities in caring for patients' health, developing strategies to improve their health paradigms, and working to enhance the lives of young professionals.

FACULTY LEADERSHIP ACHIEVEMENTS

Several distinguished faculty members from the LSU School of Nursing were elected to lead prominent national organizations. Dr. Jennifer Manning was elected president of the National Clinical Nurse Specialist Association. Her leadership is expected to bring innovative advancements and strategic direction to the organization, further cementing her status as a leader in clinical nursing. Dr. Demetrius Porche was appointed chair of the Implementation Science and Scholarship Network of the Americas. His role will focus on advancing the integration of scientific research into practical nursing applications, reflecting his dedication to bridging the gap between research and clinical practice.





DR. ANGELA JOHNSON VOTED CHAIR-ELECT OF AMERICAN COLLEGE OF PHYSICIANS (ACP) BOARD OF GOVERNORS

Angela Johnson, MD, professor of clinical medicine and section chief of internal medicine at LSU Health New Orleans School of Medicine's Baton Rouge campus, is the chair-elect of the American College of Physicians (ACP) Board of Governors. The Board of Governors is an advisory board to the Board of Regents, the college's policy-making body. ACP is the largest medical specialty organization in the United States, with members in more than 145 countries worldwide.

ALS CLINIC RECOGNIZED AS CENTER OF EXCELLENCE

The LSU Health New Orleans ALS Clinic was recently recognized as an ALS Association Certified Treatment Center of Excellence, making it one of only two designated centers in Louisiana. An estimated 5,000 individuals are diagnosed annually in the United States. The LSU Health New Orleans ALS Clinic is committed to providing exemplary interprofessional care to individuals facing the challenges of Amyotrophic Lateral Sclerosis (ALS or Lou Gehrig's disease).





CANCER PREVENTION

A research team from LSU LCMC Health Cancer Center has been awarded a \$1.5 million grant to eliminate barriers to cervical cancer prevention. The five-year program combines a \$1.2 million award from the American Cancer Society and a \$75,000 a year for five years investment from LSU Health New Orleans. Louisiana has one of the highest cervical cancer death rates in the country.



RENOWNED PATHOLOGIST JOINS LSU HEALTH SHREVEPORT

LSU Health Shreveport welcomed Jim Zhai, PhD, as chair of Pathology & Translational Pathology after a national search. Zhai was named the president-elect for the College of American Pathologists, the leading organization for board-certified pathologists, in October 2023. Zhai is internationally renowned as a surgical pathologist and a nationally sought-after speaker in several subspecialties, including Head and Neck, Thyroid, GU, and Diagnostic and Prognostic Immunohistochemistry. His research focuses on integrating morphology, immunohistochemistry, and liquid biopsy with clinical relevance, translating emerging molecular advances into diagnostic and therapeutic guidance for everyday practice.



MORE THAN \$5 MILLION IN NIH GRANTS

Two LSU Health Shreveport faculty members were awarded prestigious and highly competitive grant funding from the National Institutes of Health (NIH).



Ana-Maria Dragoi, MD, PhD, assistant professor of molecular and cellular physiology, was awarded an R01 grant totaling \$1,788,500 over five years from the NIH's National Institute of Allergy and Infectious Diseases, her first R01 grant. Funding from the NIH will allow Dr. Dragoi to study how Neisseria gonorrhoeae, the bacteria that causes the sexually transmitted disease gonorrhea, interacts with the immune system and avoids natural immune responses. Her research will work to identify new ways to combat and treat gonorrhea, which is an urgent public health concern due to rising antibiotic resistance.



Md. Shenuarin Bhuiyan, PhD, associate professor of pathology and translational pathobiology, was awarded an R01 grant totaling \$3,301,740 over five years from the NIH's National Heart, Lung and Blood Institute. Dr. Bhuiyan's research focuses on defining new physiological functions of the Sigma-1 receptor (Sigmar1) – a widely expressed protein in the heart – and discovering its protective functions during adverse changes to the heart and heart failure. These studies will uncover new perspectives on how to approach heart failure treatments and provide candidates who could be treated for the disease with medications and genetic targeting.

LEADING LOUISIANA'S DEPARTMENT OF HEALTH

LSU Health Shreveport School of Medicine alumnus Dr. Ralph Abraham was appointed as the Louisiana Department of Health Secretary in 2023. He now leads the state's largest agency that delivers medical, preventative, and rehabilitative services to millions of Louisianans. Dr. Ralph Abraham graduated from the School of Medicine in 1994 after completing a veterinary medicine doctorate and 10 years of practice as a veterinarian. After a residency in Family Medicine, Dr. Abraham practiced in rural Northeast Louisiana for over 30 years.



ONE OF NATION'S BEST OTOLARYNGOLOGY PROGRAMS

The School of Medicine's Otolaryngology-Head and Neck Surgery Residency Program ranked in the top five programs in the country on the annual Otolaryngology Training Exam. Each year, otolaryngology residents from roughly 120 programs take this exam, and this year LSU Health Shreveport's outstanding residents were top performers, an incredible accomplishment and evidence of the robust training program.



RESEARCHING STRESS ON LONG-DURATION DEPLOYMENTS

LSU Health Shreveport and Air Force Global Strike Command, headquartered at Barksdale Air Force Base, have signed a Cooperative Research and Development Agreement to study the physiological and cognitive stress that B-52 aircrews experience on long-duration deployments, also known as sorties. Findings from the project will be used to develop evidence-based training protocols to further optimize the capability and capacity of B-52 aircrews for sustained and dynamic operations under increased cognitive, emotional, and physical stress conditions.



IMPROVING CANCER PATIENT OUTCOMES

Feist-Weiller Cancer Center (FWCC), a Center of Excellence in Cancer Research, Treatment and Education at LSU Health Shreveport and Loxo@Lilly, the oncology unit of Eli Lilly and Company, recently launched a new research collaboration that will provide next-generation sequencing (NGS) access to underserved cancer patients in the northern Louisiana region. Health disparities are present in North Louisiana, with a cancer mortality rate that is 11.3% higher than the national rate.





IMPROVING HEALTH IN RURAL COMMUNITIES

The LSU AgCenter received \$4 million from the Centers for Disease Control and Prevention (CDC) for the five-year High Obesity Program (HOP). The program funds universities working with local cooperative extensions in mostly rural counties where 40% or more of adults suffer from obesity. The funding will allow the LSU AgCenter Healthy Communities team to address health disparities related to nutrition, physical activity, and obesity in 12 rural parishes. The Healthy Communities and High Obesity Program has been working for eight years to improve access to healthful foods and opportunities for physical activities with the aim at improving overall health outcomes of residents in rural communities.

CONTROLLING THE EXPLODING FERAL HOG POPULATION

After years of research to find an effective way to control exploding populations of feral hogs, a patent has been issued for a bait developed by scientists in the LSU AgCenter and LSU Department of Chemistry. The bait uses sodium nitrite, which can be lethal to feral swine, the culprits behind millions of dollars in damage to agricultural fields and forestlands in Louisiana and across the country. The inventors include Glen Gentry, an animal scientist and director of the LSU AgCenter Bob R. Jones-Idlewild Research Station in Clinton; John Pojman, an LSU chemistry professor; and Baylen Thompson, a former graduate student who worked under Pojman.



DIMINISHING THE DAMAGE BY INVASIVE SPECIES

The LSU AgCenter is creating a center to mitigate damage by invasive species. The Center of Research Excellence for the Study of Invasive Species will provide pioneering and transformational solutions to problems associated with invasive species in the southern United States, with the aim of mitigating the destruction these organisms bring. Invasive species cause \$120 billion in damage in the U.S. each year, harming agricultural production, human habitation, forestland, wetland, and native species. They threaten economic and ecological stability, displace native species, and increase agricultural production costs. The center will provide a framework for the creation of the Mississippi River Invasive Species Consortium, with the LSU AgCenter working as the coordinating institution for research, education, and outreach efforts involving partner institutions in states along the Mississippi River.



IMPROVING WATER QUALITY IN URBAN SETTINGS

A \$1.5 million EPA grant is funding LSU AgCenter Botanic Gardens at Burden faculty, along with LSU's Department of Civil & Environmental Engineering and the LSU AgCenter Hammond Research Station, to study biofilters for nutrient capture and water quality improvement in urban areas. The work will examine stormwater in the wetlands and "borrow pit" — a term referring to dirt that was "borrowed" years ago to build the interstate highway that runs through the Burden property - which Jeff Kuehny, director of the Botanic Gardens, said is impaired with chemicals above EPA limits, and will also explore remediation methods.

PRESERVING GENETIC RESOURCES

The LSU AgCenter's Aquatic Germplasm & Genetic Resources Center received a \$2.6 million grant to advance its research in genetic resource preservation. The center is a one-of-a-kind facility providing global leadership in the quest to protect aquatic species. The grant supports innovative efforts to enhance methods for genetic resource management, reduce costs, and promote animal welfare by decreasing the need for live specimens in research.





Pennington Biomedical Research Center Louisiana State University

SAVING LIVES THROUGH SCREENING

The Pennington Biomedical Research Center, in collaboration with LSU Health New Orleans School of Medicine, has developed an innovative screening tool to detect endometrial cancer early, particularly among young and underserved women in Louisiana. This partnership between Vance L. Albaugh, MD, PhD, a metabolic surgeon with Pennington Biomedical's Metamor Institute, and Amelia Jernigan, MD, division director of Gynecologic Oncology at the LSU School of Medicine in New Orleans, has already screened 2,000 women and aims to identify cancer at its earliest stages, potentially preventing invasive treatments. Endometrial cancer is the fastest-growing cancer in young women in Louisiana.



NATIONAL HEALTH INNOVATION NETWORK TO BOOST BREAKTHROUGHS

Pennington Biomedical Research Center was named a spoke in the Advanced Research Projects Agency for Health (ARPA-H) Investor Catalyst Hub and ARPA-H Customer Experience Hub. The ARPA-H, headquartered in the Department of Health and Human Services in Washington, D.C., operates regional hubs that comprise ARPANET-H — a nationwide health innovation network dedicated to the needs of people: listening to, learning from, and building trust with communities to enable access to critical health innovations for all Americans. The Investor Catalyst Hub connects researchers, entrepreneurs, and investors to accelerate the development of innovative health care solutions. This hub will facilitate new research findings and future-forward ideas to advance commercialization, affordability, and revolutionary breakthroughs.



TRAINING FUTURE RESEARCHERS

Pennington Biomedical's Scientific Training and Education secured a grant of \$500,000 for the development of a new training course, "Clinical Methods for Nutrition and Obesity Research," to be held at the Center. The course will bring the next generation of postdoctoral researchers and early-career faculty in obesity and nutrition methods from around the world to Baton Rouge. The five-day course will provide gold standard and cutting-edge research methodologies for conducting obesity and nutrition related research. The grant is the first of its kind for Pennington Biomedical and adds another training course at the Center along with the recently launched Bray Obesity Symposium on-demand review course for the American Board of Obesity Medicine, or ABOM, exam.

WORLD'S MOST CITED RESEARCHERS

Five Pennington Biomedical Research Center faculty members and one adjunct professor rank among the most cited researchers in the world, according to the Google Scholar Citations database. When a paper is frequently cited, it indicates that other scientists are using those results to test and prove new theories, which provide fresh discoveries. This process is how research serves as the basis for continuously advancing science and improving health.

- Claude Bouchard, PhD, LSU Boyd Professor Emeritus and formerly the John W. Barton, Sr. Endowed Chair in Genetics and Nutrition, has the center's highest h-index at 188, according to Google Scholar Citations, which places him among the top 200 most cited researchers worldwide. His research centers on the genetics and consequences of obesity and the health benefits of exercise. His papers have been cited 166,460 times.
- Steven Heymsfield, MD, professor and director, Metabolism and Body Composition Laboratory, has an h-index of 165, which places him among the top 500 most cited researchers worldwide. His papers have been cited 119,358 times.
- George Bray, MD, LSU Boyd Professor Emeritus and Pennington Biomedical's first executive director, has an h-index of 149. His papers have been cited 118,072 times.
- Eric Ravussin, PhD, director, Nutrition Obesity Research Center; Douglas L. Gordon Chair in Diabetes and Metabolism; and LSU Boyd Professor, has an h-index of 144. His papers have been cited 76,305 times.
- Peter Katzmarzyk, PhD, associate executive director for Population and Public Health Sciences; professor; and Marie Edana Corcoran Endowed Chair in Pediatric Obesity and Diabetes, has an h-index of 127. His papers have been cited 76,042 times.

DASH DIET IS ONE OF THE BEST

U.S. News & World Report continues to rate the DASH diet as one of the best diets. Since 2011, the DASH diet has been rated among the top in the Best Diet Overall and Best Diet for Healthy Eating, as a trusted approach to improving heart health and managing blood pressure. The American Heart Association also ranks the DASH Diet as the top hearthealthy eating style. The DASH (Dietary Approaches to Stop Hypertension) diet was developed because of a federally funded trial at four sites, one of which was Pennington Biomedical. The diets from those trials were finalized by researchers at Pennington Biomedical. Following the DASH studies, the results were so significant that this diet became the main diet recommended by the National Heart, Lung, and Blood Institute of the National Institutes of Health.



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