

## RESEARCH WINS!

Overall—record research activity! LSU set a record last year with almost \$430 million in total R&D.

<https://www.lsu.edu/mediacenter/news/2023/09/11-research-activity-milestone.php>

### A—Agriculture

Through the 64 AgCenter extension offices, 15 research stations, and Sea Grant offices, every farmer, fisherman, and parish in the state have direct access to LSU and its experts.

Rice, sugarcane, and sweet potato represent \$2 billion in value to Louisiana, and farmers statewide benefit from LSU AgCenter's research in developing crop varieties.

60 percent of the rice planted in Louisiana farmers was developed by LSU and the AgCenter, and new varieties will be developed thanks to a new \$10 million USDA research grant.

<https://www.lsuagcenter.com/articles/page1698411961028>

<https://www.lsuagcenter.com/profiles/tblanchard/articles/page1675978638211>

<https://www.youtube.com/watch?v=zuFzntbjWz0>

(Note: This story is currently in development for April 2024's Working for Louisiana)

Louisiana leads the nation in sugarcane production, and LSU has worked with farmers statewide for over 100 years on new sugarcane varieties to increase yield.

<https://www.lsuagcenter.com/articles/page1690398010550>

An LSU ag scientist just won a national award for helping Louisiana's sweet potato farmers increase their yield. (We're #1 in the nation in sweet potato research.)

<https://www.lsuagcenter.com/profiles/jmorgan/articles/page1679685810897>

LSU secured a Board of Regents center to combat invasive species on land and in water. For example, LSU ag scientists and a chemist just patented a sleep-inducing bait for feral hogs.

*\*\* Louisiana has more than 1 million feral hogs, which are dangerous to crops, people, and the environment.*

<https://www.lsuagcenter.com/articles/page1695323836941>

Through its statewide 4-H program in all 64 parishes, LSU supports more than 100,000 young students in Louisiana to secure the future of farming and food.

### B—Bio-Med

LSU's Pennington Biomedical Research Center has been involved in the development of ALL approved obesity medications on the market.

An LSU biologist won the university's largest early-career award ever—more than \$1 million—for research to help people and animals who suffer from anxiety and PTSD.

<https://www.lsu.edu/science/biosci/news/2023/lattin-nsfcareeraward.php>

The new \$80-million center for medical education at LSU Health Shreveport brings the first high biosafety lab to serve North Louisiana.

<https://www.lsu.edu/scholarship-first/blog/2023/12/11-lsuhs-med-center.php>,  
<https://research.lsuhs.edu/news/story/~board/education/post/lsu-health-shreveport-celebrates-major-milestone-with-unveiling-of-79m-center-for-medical-education>

The FDA cleared a rapid test developed by an LSU Health New Orleans doctor to detect sepsis, the leading (#1) cause of death in hospitals.

*\*\* It is now being used to save lives and dollars at Our Lady of the Lake Health, LSU's Championship Health Partner.*

<https://www.lsuhs.edu/newsroom/Study%20Results%20Validate%20a%20Rapid%20Diagnostic%20Test%20for%20Sepsis%20in%20the%20Emergency%20Department.html>

(Note: This story is currently in development for April 2024's Working for Louisiana)

The LSU Health New Orleans nursing school is ranked #10 in the nation and has graduated Louisiana's nurses for 90 years.

[https://www.lsuhs.edu/news/lsu\\_health\\_celebrates\\_90\\_years\\_of\\_nursing\\_excellence.aspx](https://www.lsuhs.edu/news/lsu_health_celebrates_90_years_of_nursing_excellence.aspx)

LSU Alexandria has created Central Louisiana's first dental hygiene program with support from LSU Health New Orleans.

[https://www.lsuhs.edu/news/lsua\\_and\\_lsu\\_health\\_new\\_orleans\\_school\\_of\\_dentistry\\_unveil\\_pioneering\\_dental\\_hygiene\\_program\\_in\\_central\\_louisiana.aspx](https://www.lsuhs.edu/news/lsua_and_lsu_health_new_orleans_school_of_dentistry_unveil_pioneering_dental_hygiene_program_in_central_louisiana.aspx), <https://www.lsu.edu/working-for-louisiana/news/2023/03-roi-lsua-dental.php>

## C—Coast

The National Oceanic and Atmospheric Administration, or NOAA, awarded LSU \$5 million to build a coastal high-frequency radar system to monitor ocean currents for Louisiana's seafood, shipping, and energy industries.

<https://www.lsu.edu/cce/mediacenter/news/2023/9/hfradar.php>

The U.S. Army and LSU are using Louisiana as a living lab to study nature-based solutions to protect military assets and the coast.

[https://www.lsu.edu/cce/mediacenter/news/2022/11/deeds\\_project.php](https://www.lsu.edu/cce/mediacenter/news/2022/11/deeds_project.php)

LSU and Tulane got \$22 million from the National Academies to lead a big team to predict long-term impacts of state and federal efforts to control the Mississippi River.

*\*\* This work protects Louisiana residents and industry that depends on the river and the Gulf.*

[https://www.lsu.edu/science/news\\_events/cos-news-events/2023/december/bentley\\_saving\\_miss\\_delta.php](https://www.lsu.edu/science/news_events/cos-news-events/2023/december/bentley_saving_miss_delta.php)

[https://www.lsu.edu/mediacenter/news/2023/11/1\\_miss\\_delta.php](https://www.lsu.edu/mediacenter/news/2023/11/1_miss_delta.php)

(Note: This story is currently in development for April 2024's Working for Louisiana)

LSU and LaHouse are working on the ongoing insurance crisis by developing resilient building practices and materials to increase long-term value for Louisiana home owners and residents.

<https://www.lsuagcenter.com/articles/page1702912294997>,

<https://www.lsuagcenter.com/articles/page1690214589576> ,

<https://www.lsu.edu/mediacenter/news/2023/03/wfl-lahouse.php>

LSU was awarded \$880,000 from the National Academies to help the Louisiana Pointe-au-Chien Indian Tribe protect its people and ancestral lands.

[https://www.lsu.edu/mediacenter/news/2024/01/08\\_lsu\\_nationalacademies\\_louisianatribe\\_coast.php](https://www.lsu.edu/mediacenter/news/2024/01/08_lsu_nationalacademies_louisianatribe_coast.php)

## D—Defense

LSU operates the only NSA-funded cybersecurity clinic for small businesses, who work directly with students to understand and improve their cyber defense.

<https://www.lsu.edu/mediacenter/news/2023/06/13-cyber-clinic.php>,

<https://www.lsu.edu/mediacenter/news/2023/09/wfl-cyber-clinic.php>

LSU stood up a Security Operations Center (SOC) where students work with industry every day to defend against real cyberattacks on universities across the state.

<https://www.lsu.edu/mediacenter/news/2023/03/wfl-cyber.php>,

<https://www.lsu.edu/mediacenter/news/2023/09/wfl-soc.php>,

[https://www.lsu.edu/mediacenter/news/2023/10/19\\_cybersecurity\\_operations\\_center.php](https://www.lsu.edu/mediacenter/news/2023/10/19_cybersecurity_operations_center.php)

(Note: This story is currently in development for April 2024's Working for Louisiana)

LSU's federally funded CyberCorps – where cyber students work for the government after graduation – is one of the largest in the country, securing \$3.7 million so far for the students and the state.

<https://www.lsu.edu/mediacenter/news/2023/09/wfl-sfs.php>

LSU is one of only 20 schools in the country to be designated by the NSA as a National Center of Academic Excellence in Cyber Operations, the agency's most technical designation.

<https://www.lsu.edu/blog/2023/09/19caedesignation.php>

In the past year, LSU secured more than \$13 million in R&D from national security, intelligence, law enforcement, and defense agencies to tackle cyber and security problems.

[https://www.lsu.edu/mediacenter/news/2024/01/11\\_cybersecurity\\_usdhs\\_onlinecrime.php](https://www.lsu.edu/mediacenter/news/2024/01/11_cybersecurity_usdhs_onlinecrime.php),

<https://www.lsu.edu/mediacenter/news/2023/06/20-cyber-darpa.php>

## E—Energy

LSU just won the national championship in R&D with the largest National Science Foundation grant ever awarded. LSU's statewide team, called FUEL, will work to advance energy innovation.

*\*\* The project includes research, workforce, and commercialization efforts that will help create up to 250,000 new jobs in the state.*

<https://www.lsu.edu/mediacenter/news/2024/01/29-nsf-energy-grant.php>,

[https://www.lsu.edu/mediacenter/news/2024/01/29\\_fuel\\_industry.php](https://www.lsu.edu/mediacenter/news/2024/01/29_fuel_industry.php)

(Note: The workforce aspect of this story is currently in development for April 2024's Working for Louisiana)

LSU beat out nearly 400 schools and regions to secure a Tech Hubs designation for Louisiana.

[https://www.lsu.edu/mediacenter/news/2023/10/23\\_lsu\\_glow.php](https://www.lsu.edu/mediacenter/news/2023/10/23_lsu_glow.php)

LSU and Shell partnered to win \$5 million in funding from the U.S. Department of Energy to develop Direct Air Capture (DAC) technology in Louisiana.

*\*\* DAC technology can harvest carbon directly from the atmosphere, which then can be used to make products.*

[https://www.lsu.edu/ces/news/2023full.php#a2023\\_12](https://www.lsu.edu/ces/news/2023full.php#a2023_12)