



Kentucky State University Research Capacity

A public, comprehensive HBCU, Kentucky State University (KSU) has a robust capacity for research, with:

- An established record of preparing students of color, first-generation students, and Pell-grant recipients for successful research careers
- Over 20 labs supporting STEM and agriculture-related research, a research and demonstration farm, and the Aquaculture Research Center, the only research center of its kind in Kentucky
- Seven master's degree programs and a doctoral degree program in nursing practice

History

Founded in 1886 and named a land grant college under the Second Morrill Act of 1890, KSU became Kentucky's second state-supported institution of higher learning. KSU's Land Grant Program has grown to support cutting-edge research in a wide range of areas, including but not limited to apiculture, plant genetics, soil science, geospatial technology applications, environmental studies, agroforestry, organic agriculture, aquaculture, food safety, nutrition science, and agribusiness.



The Land Grant Program provides numerous opportunities for collaborations with faculty, staff, and students in other programs, such as the biology, computer science, business, and education programs, and stimulates research across the university.

R&D Expenditures

In the NSF's Higher Education Research and Development (HERD) survey for FY2021, KSU ranked 3rd in R&D expenditures among other institutions of higher education in Kentucky, behind the University of Kentucky and the University of Louisville. KSU ranked 21st in R&D expenditures among HBCUs nationwide.

The main source of external funding for research at KSU is the U.S. Department of Agriculture. In recent years, faculty, staff, and students have also received significant research support from NASA, NSF, the U.S. Department of Energy, and private sources.



Partnerships

KSU has strong research partnerships with the University of Kentucky, the University of Louisville, regional universities in Kentucky, and other 1890 land grant institutions. Faculty and staff have collaborated on several state- and region-wide initiatives to increase participation in research, including NSF-funded EPSCoR and LSAMP initiatives.

KSU recently became a member of the NIH-funded KY INBRE network supporting the development of biomedical research capacity in Kentucky. It also participates in the Kentucky Commercialization Ventures network, which provides technology transfer and research commercialization support to faculty, students, and staff.

Colleges

The College of Agriculture, Community, and the Sciences (CACS) has more than 60 faculty members, including specialists in STEM, nursing, and education research, as well as agriculture-related research. CACS also houses Cooperative Extension, which has nearly 100 staff members who share the benefits of research at KSU with underserved farmers, youth, families, and communities across Kentucky.

The College of the Humanities, Business, and Society (CHBS) has more than 40 faculty members, specializing in business, psychology, social work, communications, and humanities research.



Graduate Programs

KSU has several strong and growing graduate programs that train students in research. The Master of Science program in aquaculture and aquatic studies is one of the leading aquaculture programs in the U.S.

The Master of Science program in environmental studies emphasizes basic research on ecological processes, as well as applied research, to address environmental challenges.

The master's program in computer science provides opportunities to specialize in information engineering or cybersecurity.

The Doctor of Nursing Practice (DNP) program prepares students to be adult-gerontological primary care practitioners and requires students to complete a research project as part of their preparation.

Facilities

KSU's facilities are distributed across 882 acres and include a 311-acre research and demonstration farm and a 306-acre environmental education center. The main campus in Frankfort, Kentucky's capital city, has 29 buildings housing a wide variety of labs, classrooms, and meeting spaces.

Hathaway Hall houses KSU's computer science programs and encompasses six computer labs for use by faculty, staff, and students, with general purpose, cybersecurity, gaming and simulation, and Apple workstations. It also has a dedicated research lab for master's students. Carver Hall houses the biology, chemistry, and physics programs and has a total of 10 labs, including microbiology, molecular biology, instrumental analysis, and physical chemistry labs.

On the main campus, agriculture-related research takes place primarily in the Atwood Research Facility, Cooperative Extension Building, and Aquaculture Research Center. The Atwood Research Facility features labs for the study of soil, plants, and insects, and a geospatial lab houses state-of-the-art computers, drones, and cameras. The Aquaculture Research Center includes a hatchery with spawning, holding, and experimental tanks, a histology lab, nutrition lab, genetics lab, and water quality lab.



Given the achievements of its faculty and students and the strength of its research infrastructure and partnerships, KSU is poised to further develop and expand its research capacity in the coming years and achieve national recognition for the impacts of its research, training initiatives, and public service.