Louisiana Networks of Excellence for Tomorrow (LA-NEXT)

In the fall of 2024, Louisiana succeeded in acquiring a competitive grant from the National Science Foundation's EPSCoR Collaborations for Optimizing Research Ecosystems (E-CORE) program. The result of that effort is the Louisiana Networks of Excellence for Tomorrow (LA-NEXT) project, whose mission states that:

LA-NEXT will drive a transformation of the R&D ecosystem through coordination, facilitation, and capacity building in strategic areas identified by FIRST Louisiana 2030, Louisiana's updated higher education science & technology plan. The goals of LA-NEXT are designed to realize this vision and dramatically expand the constituencies involved in Louisiana's research enterprise.
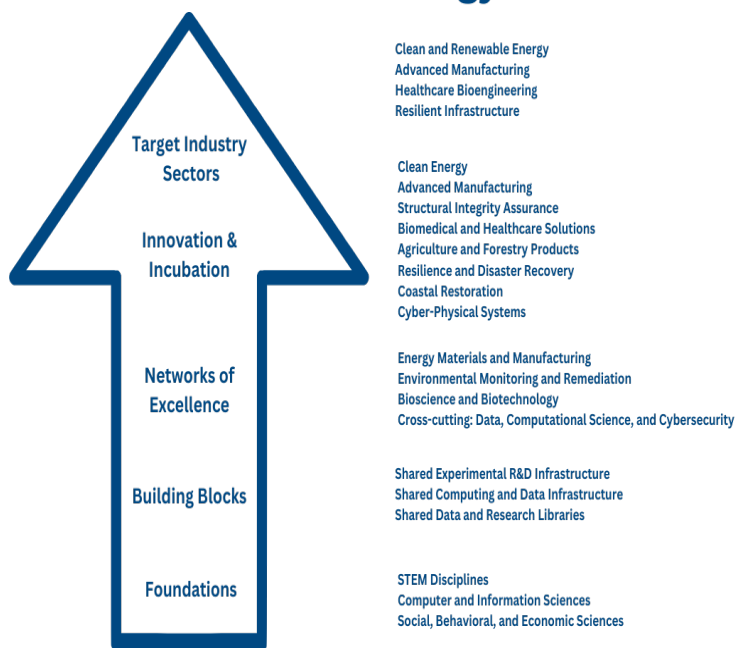

colleges, primarily undergraduate institutions, and the various research intensive institutions into the research enterprise.

Science & Technology Framework

Target Industry Sectors
- Clean and Renewable Energy
- Advanced Manufacturing
- Healthcare Bioengineering
- Resilient Infrastructure

Innovation & Incubation
- Clean Energy
- Advanced Manufacturing
- Structural Integrity Assurance
- Biomedical and Healthcare Solutions
- Agriculture and Forestry Products
- Resilience and Disaster Recovery
- Coastal Restoration
- Cyber-Physical Systems

Networks of Excellence
- Energy Materials and Manufacturing
- Environmental Monitoring and Remediation
- Bioscience and Biotechnology
- Cross-cutting: Data, Computational Science, and Cybersecurity

Building Blocks
- Shared Experimental R&D Infrastructure
- Shared Computing and Data Infrastructure
- Shared Data and Research Libraries

Foundations
- STEM Disciplines
- Computer and Information Sciences
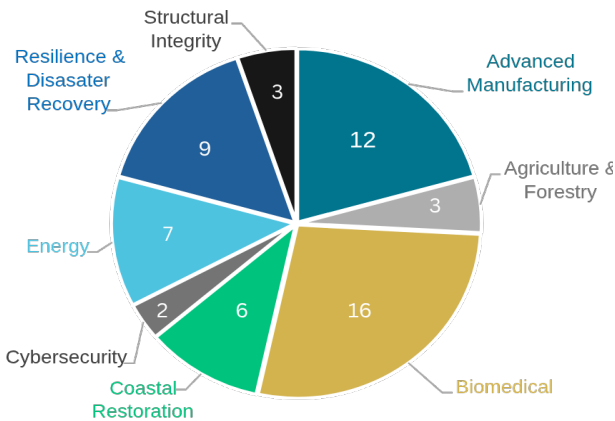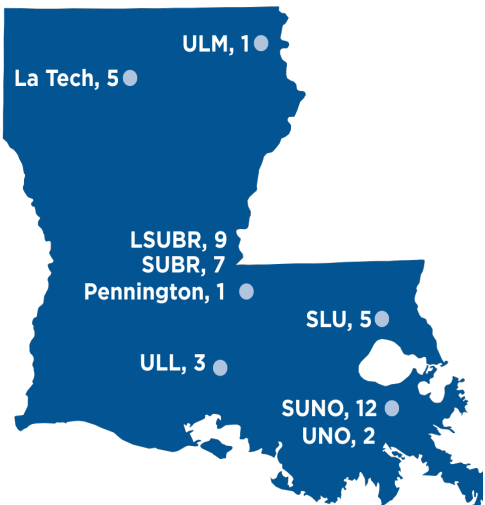- Social, Behavioral, and Economic Sciences

To achieve this mission, Louisiana Tech University, Louisiana State University A&M, Southern University A&M, and the University of New Orleans have teamed up with Louisiana NSF EPSCoR (Board of Regents) to form LA-NEXT to incorporate all of the state's institutions of higher education including community

5 Interlocking and Interacting Cores

LA-NEXT is organized into five interlocking and interacting cores. The Administrative Core (AC) manages communications, coordination, grant management, and external evaluation. Workforce Development Core (WDC) aims to enhance curriculum, provide hands-on training at shared facilities, and offer scholarships for two-year faculty. The Research Capacity Building Core (RCBC) offers mentoring academies, seed grants, graduate scholarships, and undergraduate research. The Higher Education & Career Pathways Core (HECPC) is charged with developing the science communications professional pipeline with Art for Science, digital painting, virtual reality, and videography. Finally, the Networks of Networks Core (NNC) weaves a tapestry of networks around competitions, outreach, and community development activities.

These five cores of activity will invigorate the research ecosystem and be driven by LA-NEXT seed grants including the Supervised Undergraduate Research Experience (SURE), Links with Industry & National Labs (LINKS), Initiating Growth through Networks & Interdisciplinary Teamwork (IGNITE), Graduate Student Supplements, (GRASS), and Core User Facilities, (CUF).

LA-NEXT Supervised Undegraduate Research Experience (SURE) Awards Announced

The Research Capacity Building Core (RCBC) of LA-NEXT provides a competitive opportunity for undergraduates to earn research funding for a supervised research project through the SURE seed program. The objective is to develop the STEM pipeline by providing an early on-ramp into research.

For 2025, 87 proposals were entered into the competition. Of those, 45 have been identified as meritorious and approved for funding. The map of Louisiana to the right identifies the number of successful proposals per institution, with Southern University of New Orleans leading the pack with 12 funded SURE projects.

Map labels:
ULM, 1
La Tech, 5
LSUBR, 9
SUBR, 7
Pennington, 1
SLU, 5
ULL, 3
SUNO, 12
UNO, 2

SURE Awards by Research Area

Pie chart values: Structural Integrity 3, Advanced Manufacturing 12, Agriculture & Forestry 3, Biomedical 16, Coastal Restoration 6, Cybersecurity 2, Energy 7, Resilience & Disaster Recovery 9

FIRST Louisiana 2030 has established a set of priority industrial and translational research target areas for exploration. The figure shown left identifies the SURE projects funded by specific these research areas. Biomedical leads with 16 funded proposals. Advanced manufacturing, an engineering field, follows closely with 12 submissions, and resilience & disaster recovery garners nine projects. Additional areas of student interest include: energy (7), coastal restoration (6), structural integrity (3), agriculture & forestry (3), and cybersecurity (2).