

Strategic Research THEMES AND SUB-THEMES

Texas A&M University's Research Enterprise Strategic Plan for 2023-2030 identifies six strategic research themes and 21 sub-themes that leverage Texas A&M's strengths, capacity and capabilities across multiple disciplines. These themes and sub-themes provide opportunities for Texas A&M to i) strengthen its tripartite mission of research, teaching and outreach; ii) advance research excellence and scholarship through collaborations; iii) address state, national and global challenges; iv) deliver significant societal impact; and v) elevate Texas A&M's status and ranking as a global research leader.

In addition, the themes align with the national and global research-and-development agenda and priorities of key federal research-and-development funding agencies—including Department of Defense and its Defense Advanced Research Projects Agency, National Institutes of Health, Department of Energy and its National Laboratories, National Aeronautics and Space Administration, National Science Foundation, Department of Agriculture, Department of Commerce and Department of Education—and the Texas Legislature.

Strategic initiatives that center around the research themes/sub-themes will be defined and developed, in consultation with the research enterprise community and stakeholders.

COMMUNITY, CULTURE AND ECONOMIC RESILIENCE

- Arts Ecosystem and Culture
- Human Development and Social Dynamics
- Workforce and Future of Work



EMERGING TECHNOLOGIES AND INNOVATIONS

- Artificial Intelligence, Learning and Autonomy
- Biotechnology and Biomanufacturing
- Data, Visualization and Information Technologies
- Microelectronics and Semiconductors
- Quantum Science and Technology



HEALTH AND QUALITY OF LIFE

- Diagnostics, Treatments, Intervention and Cures
- Disease Prevention and Health Promotion
- Health Disparities and Community Health



NATIONAL SECURITY

- Biodefense and Biosecurity
- Cybersecurity
- Nuclear Security
- Advanced National Security Technologies



SPACE EXPLORATION

- Human Space Flight
- Space Engineering and Construction
- Earth and Planetary Sciences



SUSTAINABILITY AND ENVIRONMENT

- Climate Resilience and Mitigation
- Energy Transition/Clean Energy
- Food-Energy-Water (FEW) Nexus

