

Research Theme 4 NATIONAL SECURITY

The Texas A&M University *research enterprise* encompasses all elements that come together to address critical research needs (basic, applied or translational) including all stakeholders, resources and infrastructure. Delivering outcomes and results that promote knowledge growth and solve or prevent challenges for the public good are the basis for the research enterprise strategic plan.



SUB-THEMES

▶ BIODEFENSE AND BIOSECURITY

Examples of Research Areas of Strength/Opportunity within Texas A&M
Detection/forecasting, rapid response/contamination, pandemic response, one health, rapid therapy/vaccine development, applied biosafety/bio-risk mitigation, environmental surveillance, manufacturing, supply chain

Alignment with National and Texas Legislative Priorities

NIH, DOE, NL, DARPA, DHS, CDC, MULTI-AGENCY R&D, NATIONAL BIODEFENSE, NATIONAL SECURITY, NATIONAL LABS, SBIR/STTR, USAID

Texas A&M Capacity (Initial Mapping of Alignment with Colleges, Schools, Agencies and Centers/Institutes/Core Facilities)

HSC (SoM, SoP, SPH), CAS, TEES (COE), AGLR (COALS, VMBS), TDEM, TVMDL, TEEX, BUSH, GHRC, IIAD, CBTS, IQSE, NCTM, CIADM, TEMAG, TxGEN

▶ CYBERSECURITY

Examples of Research Areas of Strength/Opportunity within Texas A&M
Cybersecurity assessment, human dimensions, cyber modeling, privacy versus security, governance

Alignment with National and Texas Legislative Priorities

NSF, DOD, DOC, DOE, DARPA, AFOSR, CHIPS ACT, MULTI-AGENCY R&D, NATIONAL SECURITY, SBIR/STTR, NATIONAL LABS

Texas A&M Capacity (Initial Mapping of Alignment with Colleges, Schools, Agencies and Centers/Institutes/Core Facilities)

CAS, TEES (COE), LAW, MAYS, SEHD, TEEX, CC, GCRI, HPRC, BCDC, CI, TAMC2

▶ NUCLEAR SECURITY

Examples of Research Areas of Strength/Opportunity within Texas A&M
Arms control, nuclear terrorism, risk analysis, nuclear forensics, nuclear nonproliferation, nuclear power, policy

Alignment with National and Texas Legislative Priorities

DOD, DOE, NASA, DARPA, NATIONAL SECURITY, SBIR/STTR MULTI-AGENCY R&D

Texas A&M Capacity (Initial Mapping of Alignment with Colleges, Schools, Agencies and Centers/Institutes/Core Facilities)

TEES (COE), CAS, LAW, BUSH, NPI, NSC, CI

▶ ADVANCED NATIONAL SECURITY TECHNOLOGIES

Examples of Research Areas of Strength/Opportunity within Texas A&M
Directed energy; hypersonic technology; ballistics; encryption; systems engineering; materials for extreme environments; policy

Alignment with National and Texas Legislative Priorities

DOD, DOE, NASA, DARPA, NATIONAL SECURITY, SBIR/STTR, MULTI-AGENCY R&D

Texas A&M Capacity (Initial Mapping of Alignment with Colleges, Schools, Agencies and Centers/Institutes/Core Facilities)

TEES (COE), CAS, LAW, BUSH, TTI, BCDC