



Enhancing National Security and Protecting the Homeland

America's technological-military edge and defense readiness depend on a robust ecosystem of federally funded basic scientific research at our nation's universities. Decades of federal investment in university-based research have powered not just economic growth, but also the security innovations that form the backbone of U.S. national defense and homeland protection.

The Foundation of Security: Defense Research Conducted at Universities

Every day, American universities conduct mission-critical research for agencies such as the U.S. Department of Defense (DoD), the U.S. Department of Homeland Security (DHS), the U.S. Department of Energy (DOE), and the National Science Foundation. Prominent examples of federal investment in university basic research leading to cutting-edge technological breakthroughs include GPS, advanced radar, quantum computing, and AI. These breakthroughs yield technological advantages that protect U.S. service members and help the American military maintain its technological preeminence.

Did You Know?

Nearly half of DoD basic research funding goes to universities, driving discoveries like advanced missile interception and next-generation communications for the modern battlefield.

Across the country, federal investments in basic science at higher education research institutions support defense innovation infrastructure, from secure labs to advanced testing chambers. Undercutting this support hampers warfighter readiness and weakens our national security.



Government Partnerships with Academia Drive National Security Innovation

American national security and defense innovation are supported by robust networks of DoD, DoE, and DHS-backed research partnerships with universities and affiliated research institutes – including DoD University Affiliated Research Centers (UARCs), DoD Minerva, DHS Centers of Excellence (CoEs), Federally Funded Research and Development Centers (FFRDCs), and National Laboratories. Universities serve a critical role in these partnerships, advancing mission-critical R&D deliverables that keep America safe and help give our warfighters a strategic and tactical edge.

Competition and Consequence

While the United States shrinks its commitment to basic research, competitors and adversaries, like China, are [accelerating investments in scientific research with direct military applications](#). China's rapid advancement in several technological fields – such as artificial intelligence, quantum computing, nuclear energy, and hypersonics, to name a few – is powered by intense state funding and the integration of civilian academic talent into defense initiatives. This investment is already challenging U.S. leadership in critical areas like cyber, space, and advanced manufacturing.

Return on Investment

Federal investment in university defense research delivers a return of up to [\\$10 for every \\$1](#) spent in jobs, start-ups, and economic impact. It's a strategy for long-term national competitiveness and security. University research not only generates new knowledge and sparks economic growth, but also trains next-generation talent that our armed forces and homeland security agencies rely upon to contribute technological advancements of the future.

Keep America Secure

We cannot afford to fight 21st century battles with 20th century technology. America's universities are not only sources of breakthrough inventions – they serve as hubs that develop new scientific knowledge with direct national security applications, train and develop the workforce pipeline of security experts, and deliver practical solutions for national defense.



At a time of rising global competition and evolving threats, we must strengthen federally funded basic research outlays at our colleges and universities. That's how we can best preserve the nation's technological edge, protect our service members, and safeguard the American people.