BOLSTER FEDERAL R&D PROGRAMS

The United States has built and sustained a competitive edge across key technology areas, lending it a unique and powerful source of credibility and a prominent platform on the world stage. A robust R&D landscape has been a key driver of this competitive edge for decades. While the United States still leads the world in R&D investment, U.S. primacy is dwindling as federal funding slows. Meanwhile, the global R&D ecosystem has evolved, and the United States now plays a very different role compared to its historical position. Federal support for R&D should reflect this reality and focus on partnerships and other linkages that help advance research at different stages in the R&D pipeline.

1. **Increase federal investment in R&D.**

The federal government should recommit itself to innovation leadership by substantially boosting spending on R&D, including but not limited to early-stage, basic R&D and technologies that are integral to continued U.S. competitiveness, such as advanced materials, quantum computing, semiconductor manufacturing and artificial intelligence. Specifically, Congress should pass and the President should sign legislation such as the Endless Frontier Act that significantly boosts R&D spending on key strategic technologies for U.S. innovation leadership.

2. **Support collaborative research partnerships.**

The federal government should coordinate and invest in collaborations of academic institutions, national labs and private industry to fully leverage research capabilities across the R&D pipeline and spur national innovative capacity. This work includes taking the following actions:

   a. Expand the scope and funding for existing research programs that are collaborations of the private sector, academic and research institutions, federal agencies, and national labs (e.g., the National Science Foundation's Engineering Research Centers, Industry-University Cooperative Research Centers, Manufacturing Institutes & Manufacturing Extension Partnerships, National AI Research Institutes Program, and National Quantum Initiative).

   b. Designate a portion of federal R&D funding to support and facilitate technology transfer and commercialization activity and ensure that collaborative research and manufacturing programs play a productive role in facilitating and coordinating the commercialization of innovation and intellectual property.

   c. Establish translational research centers to support the commercialization of advanced manufacturing technologies and expand collaboration between domestic manufacturers and research universities while advancing a strategic, long-term approach to supporting an innovative domestic manufacturing base.