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Committee on *Research Universities and the Future of America*

America in the 21st century is driven by innovation – advances in ideas, products, and processes create new industries and jobs, contribute to our nation’s health and security, and allow us to achieve our national goals. Innovation in the United States, in turn, has been increasingly driven by educated people and the knowledge they produce. And our nation’s primary source of both new knowledge and graduates with advanced skills is our nation’s research universities.

Today, 35 of the top 50 research universities in the world are in the United States. And the strength of these institutions, public and private, is the direct result of forward-looking federal and state policies, largely enacted by Congress and often in periods of national crisis. Over the last 60 years, federal policies and programs have concentrated basic research in our universities and funded it through federal programs that have supported a unique and extremely productive combination of research and graduate education.

Unfortunately, today our nation is confronting an ever widening innovation deficit—if the United States is to maintain its position as the world’s leader in innovation, we must close the gap between the actual level of federal government funding for research and higher education needed to maintain our status as an innovation leader and the reality of declining state and federal support for basic research and higher education.

I had the honor of chairing a National Academy of Sciences committee that examined, in response to a request from Senators Mikulski and Alexander and Representatives Gordon and Hall, the current health and competitiveness of our nation’s research universities. Our report, *Research Universities and the Future of America*, argued that our nation must reaffirm and revitalize the unique partnership that has long existed among research universities, federal and state governments, and philanthropy, and strengthen its links with business.

This partnership has driven research that has produced new drugs and technology that improve health, including synthetic insulin, blood thinners, and magnetic resonance imaging (MRI); led to innovations that make our nation safer, such as imaging technology that scans containers as they enter our ports; and contributed countless products that have revolutionized our way of life, including lasers, rocket fuel, computers, and key components of the World Wide Web. The talented graduates of these institutions have created and populated many new businesses that have employed millions of Americans—and with more than 120 research institutions across the U.S., these effects flow throughout the economy.

Just over a decade into the 21st century, a resurgent America must stimulate its economy, address new threats, and position itself in a competitive world transformed by technology,

global competitiveness, and geopolitical change. In this environment, educated people, the knowledge they produce, and the innovation and entrepreneurial skills they possess, particularly in the fields of science and engineering, are keys to our nation's future. So, it is essential that we reaffirm and revitalize the unique partnership that has long existed among the nation's research universities and the federal government and work together to close the innovation deficit.