American-Made: Companies Created from Federally Funded University Research
Fuel U.S. Innovation and Job Creation

New report highlights big return on federal government’s investment in basic scientific research

Washington, D.C. – As Congress determines the funding levels for the federal science agencies for fiscal years 2017 and 2018, a new report highlights one of the many ways investments in basic scientific research benefits the overall economy: the formation of new companies. Released today by The Science Coalition, American-Made Innovation Sparking Economic Growth, identifies 102 companies that exist because academic researchers had access to competitively awarded grants from the very agencies under consideration to receive cuts in budget proposals coming out of the White House. These agencies include the National Institutes of Health, National Science Foundation, Department of Energy, Department of Agriculture and the National Institute of Standards and Technology.

The total public investment in the foundational research behind the companies was just over $265 million* spread over several decades. The companies employ 8,900 workers in communities across the country. They are paying taxes, purchasing materials, equipment and services, and otherwise contributing to their local economies. They are doing all of this while bringing to market the type of transformational innovations that keep the United States globally competitive and the world’s leader in science and technology. An online database accompanying the report provides profiles for each company and is sortable by state, university, funding agency, and type of innovation.

“Each one of these companies is an American innovation success story and illustrates the powerful ripple effect that the partnership between the federal government and our nation’s research institutions has on society and our economy,” said Glynda Becker, president of The Science Coalition. “If Washington, D.C. is serious about creating good jobs, producing American goods, and keeping the U.S. ahead of our international competitors, then, as this report shows, continued strong and steady funding for basic scientific research is a wise investment.”

Among the findings in the report:

- The initial federal research investment is small. Eighty percent of the companies in the report cited less than $5 million as the amount of federal funding received for their foundational work. For 40 percent of companies, this amount was less than $1 million.

- The 102 companies highlighted are predominantly small businesses, like most companies in the United States. Sixty-five percent of companies have fewer than 100 employees. Yet, the companies collectively employ 8,900 people.
• Research-based companies appear to have a higher success rate than other new businesses. Eighty-eight percent of the 200 companies profiled in the two earlier volumes** of Sparking Economic Growth remain operational today or have successfully merged with or been acquired by another company. And, of the companies that were younger than five years old at the time they were profiled, 87 percent are operational today. Only about half of all new businesses in the United States survive more than five years.

• Innovation-based companies are found across the country. The 102 companies are spread across the country and are most often located in the same state as the university from which they spun out (89 of 102 companies), supporting the growth of innovation clusters that drive local and regional economies.

• Research-based spinouts fuel innovation at established companies – through partnerships and through their acquisition by larger companies. Examples of the latter include University of California, San Diego spinout Topera, which was launched in 2010 to develop a technology for cardiac arrhythmia mapping and was acquired by Abbott in 2014. That acquisition anchored Abbott’s newly formed electrophysiology business. Similarly, RedHat acquired InkTank in 2014 to beef up its cloud storage offerings and Apple snapped up facial recognition software startup Emotient in 2016 to bolster capabilities in that area.

• Many of the companies are addressing America’s most chronic and costly health challenges, including Alzheimer’s, diabetes, cardiovascular disease, and cancer. Their innovations stand to improve the lives of millions as well as potentially bring down the costs associated with these diseases.

“Basic scientific research is the smallest slice of the nation’s R&D pie, yet it is the spark that ignites discovery and innovation in the United States. The budget cuts proposed for many of America’s preeminent science agencies would risk an entire generation of discovery and innovation and all of the benefits that flow from it. We urge Congress to continue its longstanding, bipartisan tradition of supporting America’s innovation ecosystem with strong funding for basic scientific research,” said Science Coalition Vice President Anna Quider.

American-Made Innovation Sparking Economic Growth and the accompanying database of companies are available at www.sciencecoalition.org/successstories.

*Universities and/or company founders were asked to estimate the amount of federal funding that contributed to the foundational research at the root of their company’s technology. Estimates were provided for 92 out of 102 companies, totaling $265,019,045.

**This is the third Sparking Economic Growth report published by The Science Coalition. Each volume of the report has highlighted a different set of companies created from federally funded university research, totaling 302 companies to date. All three reports and a database of companies are available at www.sciencecoalition.org/successstories.

The Science Coalition is a non-profit, nonpartisan organization of the nation’s leading public and private research universities. It is dedicated to sustaining strong federal funding of basic scientific research as a means to stimulate the economy, spur innovation and drive America’s global competitiveness. Learn more at www.sciencecoalition.org.