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Alliance of U.S. Startups & Inventors for Jobs

Killing the Startup Engine:

How Royalty Seizures Would Cripple Small Business Innovation

Executive Summary

Startups and small businesses are the lifeblood of America's innovation economy. They account for almost half of U.S. economic activity and generate nine out of every ten new jobs. They are also disproportionately responsible for developing transformative technologies. According to a National Bureau of Economic Research study, patents held by startups are roughly 40% more likely to be "outlier innovations" that influence a wide range of later inventions.

But startup innovation does not happen in a vacuum. Many of the world-changing products developed by startups originate in university labs. The Bayh-Dole Act of 1980 allowed universities to retain the patents on the discoveries they made with federal funding, and license those patents to businesses — especially startups — that could perform the expensive, risky research and development needed to turn good ideas into tangible products. Many of the most transformative inventions of our time, from Google's search algorithm to mRNA vaccine technology, originated as university breakthroughs that startups later transformed into marketable technologies.

But a policy idea now under consideration in Washington could deter this collaboration between universities and the private sector. The Department of Commerce recently proposed seizing half of the royalty income universities earn from licensing their federally funded patents.

The consequences could be devastating. It could impede startups' and small businesses' ability to invest in taxpayer-funded technologies, resulting in fewer productivity-enhancing products reaching workers and consumers, and ironically, less tax revenue flowing back to the government from the economic growth these startups generate.

At a time when America's leadership in biotech, artificial intelligence, and other critical sectors relies more than ever on the dynamism of small firms, we cannot afford to weaken the system that Bayh-Dole established.

Why Bayh-Dole Works for Startups

The success of America's startup ecosystem is largely due to the Bayh-Dole Act of 1980 — a bipartisan law widely recognized as one of the most transformative innovation policy reforms in U.S. history. Before Bayh-Dole was enacted, the federal government held the patent rights to all inventions created with federal funding — almost 30,000 patents in total. Yet it licensed less than 5% of them, leaving the vast majority of taxpayer-funded innovations to collect dust.

Bayh-Dole changed that by allowing universities to own the patents on federally funded discoveries instead, which gave universities both the legal means and financial motive to partner with private entrepreneurs to bring their laboratory research to market. The impact of that change has been seismic. From 1996 to 2020, university research contributed $1 trillion to America's GDP, spawned over 19,000 startups, and supported 6.5 million jobs.

Startups have played an integral role in this innovation revolution. From the perspective of universities seeking to commercialize unproven, early-stage laboratory discoveries — many of which will never pan out — startups' creativity and relatively high risk tolerance make them ideal partners. It is no coincidence that roughly seven in 10 university patent licenses go to startups and small companies.

How Royalty Seizures Would Discourage Licensing — And Hurt Startups

Unfortunately, the Department of Commerce's new idea to take a share of universities' licensing income threatens to undermine the system that enables startup success.

Universities and other federally funded research institutions depend on patent licensing income to help sustain not just their research and development efforts, but the tech transfer offices that seek out those private-sector licensees in the first place. Basic economics suggests that a new 50% tax on that licensing income will cause many schools to scale back their tech transfer efforts, or even close their tech transfer offices entirely.

That'd diminish startups' ability to license and commercialize universities' discoveries. Virtually no startup has the capacity to constantly monitor every lab breakthrough and patent filing at all of the nation's leading research universities. Without university tech transfer offices proactively shopping around their breakthroughs to prospective partners, many potentially world-changing advances will simply never be licensed due to a lack of awareness.

Consequences for Jobs and Growth

The proposal would impede the development of new productivity-enhancing technologies, regional business and job growth, and even government tax revenues.

Blocking Breakthrough Technologies in Medicine and Beyond

Startups are the backbone of America's high-tech economy — and that's particularly true in the biotech industry. One analysis found that small biotech firms invent over half of all new medicines, and many of these drugs originate from university research. Since 1980, more than 200 drugs and vaccines have been commercialized through the Bayh-Dole system, including groundbreaking HIV therapies, the first immunotherapy medicines, and the first vaccines for Covid-19.

If startups cannot license molecules and compounds discovered in university laboratories, groundbreaking medicines will go undeveloped. This could cede global biopharma leadership to China, which recently surged ahead of the United States in launching clinical trials.

Beyond medicine, startups drive technological progress in critical sectors such as artificial intelligence, semiconductors, and energy. Advancements in these fields translate directly into tools that make workers more productive and businesses more competitive, making them vital to America's future economic strength.

Stalling Startup and Job Growth

In 2024 alone, nearly 1,000 startups formed to commercialize university inventions. These startups don't just provide livelihoods for individuals. They are also engines of growth for local communities. Research from the Information Technology and Innovation Foundation (ITIF) shows that over two-thirds of university spinouts remain within 60 miles of their home campus.

In places like North Carolina's Research Triangle and Indiana's life science corridor, homegrown startups commercializing university research have formed the foundation for entire regional economies. And as these tech clusters grow, they attract more outside investment and talent, fostering lasting prosperity.

If startups lose access to university licensing opportunities, communities across the country will see fewer high-growth firms, less job growth, and diminished opportunity.

Reducing Tax Revenues

The proposal to collect royalties on university-owned inventions is intended, in part, to bolster government revenues. But by stifling business and job growth, it could cost the government far more revenue than it would add.

When a startup focused on commercializing university research hires workers, those employees pay income taxes and payroll taxes. As a company grows, it may start paying corporate taxes. Every product it sells generates sales taxes, while a successful exit will result in capital gains taxes on investors.

North American university research parks and other innovation hubs generate $33 billion in federal tax revenue each year, according to a recent study from the Association of University Research Parks (AURP). That revenue — much of which would be lost if the technology commercialization pipeline were to collapse — far outstrips the $3.6 billion that U.S. universities collectively generated in licensing income in 2023.

Conclusion

The Bayh-Dole Act transformed America from a laggard to a leader in global innovation. By establishing a patent licensing system that encourages entrepreneurship and fuels startup formation, it has helped transform countless early-stage inventions into commercial products. This system is why the United States has long led the world in biotech and technology startups. It is also why the benefits to the public have been so extraordinary.

The federal government seizing university royalties would undermine the incentives responsible for this progress. It would make it much more difficult for small startups to license patents. The result would be fewer products, fewer jobs, and slower economic growth in communities across the United States.

To keep America's economy vibrant and globally competitive, we must protect America's startup ecosystem — and the Bayh-Dole framework that makes it possible. We cannot allow shortsighted policy to weaken this foundation of American innovation.