Good afternoon. It is indeed an honor to join this esteemed group of individuals to celebrate the 30th anniversary of the Bayh-Dole Act, which is—from my perspective—one of THE most important pieces of legislation enacted in my lifetime.

By way of background, the University System of Maryland—where I serve as Chancellor—consists of 3 research universities, 8 comprehensive institutions, two regional higher education centers, and one specialized research center.

- I served as President of our flagship campus—the University of Maryland, College Park—for ten years.
- Prior to that, I was a member of the mathematics faculty for 24 years. I was also privileged to serve for four years as president of The Ohio State University before becoming USM Chancellor.
- I also note that my father, A. D. Kirwan was a professor—and served as the seventh President—at the University of Kentucky.

So I speak to you today as someone who has spent his entire life immersed in higher education. And, as president of two AAU universities, I have a first-hand understanding of the profound, transformative impact of Bayh-Dole.

Looking back over the history of the American research universities, we can note a small number of crucial moments and decisions that dramatically changed the trajectory and greatly enhanced the role of America’s research universities.

One came at the end of World War II, when Vannevar Bush’s seminal report—“Science: The Endless Frontier”—was issued to President Roosevelt. This report reshaped our research universities, with greater access through the G.I. Bill, an emphasis on science, and a major commitment to R&D.

Another came with the Soviet Union’s successful launch of Sputnik, which caught the U.S. very much off guard. In response, President Eisenhower launched the National Defense Education Act so that Americans could develop the technological know-how to not only win the “space race,” but also be a global leader in science and technology. I am a beneficiary of the NDEA Act, which enabled me to get my PhD in mathematics.

And thirty years ago, the passage and enactment of the University and Small Business Patent Procedures Act—better known as the Bayh-Dole Act—was another such pivotal moment. In this time of political divisiveness, it is worth noting that Senator Bayh was a Democrat and Senator Dole was a Republican.
Prior to this legislation, while federal spending in support of scientific, medical, and defense-related university-based research was significant, the government lacked a coherent patent policy. The Bayh-Dole Act created a uniform patent policy among the many federal agencies funding research, creating a certainty over the rights to intellectual property.

By giving universities ownership of inventions and discoveries made through federally funded research, the Bayh-Dole Act transformed research universities into incubators for breakthroughs in technology and medicine.

Subsequent amendments and revisions to Bayh-Dole strengthened its impact on revolutionizing university technology transfer. Patent applications, licensing agreements, and new companies transforming the basic research of universities into applied research all soared, as did the development of life-altering—and life-saving—breakthroughs.

Just consider a few facts from a report the Association of University Technology Managers:

- Total funding for academic research and development grew from roughly $6 billion in 1980 to more than $45 billion in research in 2006 a roughly 7% increase.
- However, the number of patents issued to U.S. universities grew from fewer than 250 in 1980 to more than 3,250 in 2006, a nearly 15% increase.
- And, since 1980, more than 5,700 new companies have formed around university research results, the majority located in close proximity to the university.

This impressive progress is thanks in large measure to the Bayh-Dole Act.

Moreover, consider the medical and technological advancements enabled by this legislation, which continue to touch lives across the globe on a daily basis:

- Artificial lung technologies to treat respiratory ailments in newborns and aneurism treatments developed at the University of California
- Magnetic resonance imaging developed at the University of Wisconsin
- A system for the manufacturing of nano-devices developed at University of Texas.

These are just a few example of the myriad of key advances that owe their development to the Bayh-Dole Act.

Further, because of the Bayh–Dole Act, a new wave of university-federal-industry collaborations have been created, resulting in the development of whole new industries and an accelerated the pace of moving discoveries from the research lab to the marketplace.
As the Sense of Congress resolution issued in 2006 sums up:

- “The Bayh-Dole Act has made substantial contributions to the advancement of scientific and technological knowledge, fostered dramatic improvements in public health and safety, strengthened the higher education system in the United States, served as a catalyst for the development of new domestic industries that have created tens of thousands of new jobs for American citizens, strengthened States and local communities across the country, and benefited the economic and trade policies of the United States.”

There is simply no doubt about the truly transformative impact the Bayh-Dole Act has had on American research universities, our nation’s economy, and the quality of life worldwide.

With American higher education today on the cusp of what I perceive to be the next “wave” of change—with improving college completion rates and enhancing economic competitiveness becoming a national imperative—I can only hope that the same sort of visionary, insightful, bi-partisan leadership that secured the success of the Bayh-Dole Act will emerge so that we can meet and master this new set of challenges.

Once again, I want to say “thank you” to Senators Bayh and Dole and all those involved in the passage of this act for creating what—to this day—remains a phenomenal success, an unalloyed good, and a model of bipartisan action for the benefit of our nation.