

# How the American Research University Survives

University leadership needs to shift attention from chasing prestige to crafting strategies for long-term success.

By any measure—federal funding, academic freedom, prestige—2025 was a horrible year for US research universities. It also happened to be the 75th anniversary of the founding of the National Science Foundation, which anchored the compact between universities and the federal government. That compact dictated that taxpayer dollars would flow to universities and freedom of inquiry would not be unduly constrained. In return, university research would deliver a stream of scientific advances and well-educated graduates to the benefit of the health, economic prosperity, and general welfare of the United States and its citizens.

That compact has steadily evolved: The number and scope of US research universities has grown, the number of government agencies and programs actively funding university research has expanded, and the aggregate amount of taxpayer dollars invested in university research has increased. And US research universities have delivered, dominating international rankings, attracting talented students and faculty from all over the world, educating tens of thousands of scientists and engineers annually, developing cures for horrible diseases, spawning start-up tech companies, supporting regional economies, and gestating entire industries.

But the appearance of unparalleled quality and global leadership among American research universities belies a more complicated truth. Research universities have long taken “academic excellence” (most often measured simply in terms of research volume and faculty accolades) as their North Star. This focus on institutional research excellence, however, masks the fact that US universities, individually and certainly in the aggregate, are well down

a path of eroding public value and research prowess.

Perhaps the most striking signal of the decline of US research preeminence is that in 2025, Chinese scientists eclipsed their US counterparts in the *Nature Index* of the world’s most prestigious publications. This remarkable shift did not come overnight but was the result of a multidecade investment plan by the Chinese government, while federal support in the United States barely kept up with inflation—despite universities rerouting significant tuition dollars toward research.

Between 2013 and 2023, US universities expanded their research enterprise—that glittering North Star—by increasing their own internal funding. During that time, for every federal dollar received, internal university funding of research grew from 38 cents to 46 cents. By 2023, universities spent \$8 billion more than in 2013, contributing to rising tuition and further constricting access for the middle class.

So even before the Trump administration eviscerated research funding and science agencies, and proposed precipitous cuts in support, university research funding was precarious and increasingly unsustainable against all the other financial pressures facing research universities. These include holding down tuition, adjusting for declining numbers of college-aged students, and preparing for the academic upheavals caused by artificial intelligence. The inescapable conclusion is that, left to find a new equilibrium in a less supportive (and even hostile) federal environment, universities will wilt—to their individual detriment as well as to the research capacity of the country as a whole.

To correct this trajectory, radical strategic shifts are needed within individual research universities and those shifts, taken

together, must constitute an equally radical revision of the entire US system. Motivated by concern for the future of US research universities, we gathered a small group of people in a series of video conferences over the winter of 2025–2026 to examine the nature of the crisis and draft a survival guide for the US university-based research enterprise. University leadership and governing boards need to turn their attention away from chasing institutional prestige and rankings to focus instead on crafting intentional survival strategies.

### **The foundation for a new compact**

The nation relies on research universities to do three things: train the research and technical workforce; maintain and advance national capability in basic and applied (use-inspired, translational) research; and engage with peers around the world as a mechanism for international detente, recruiting talent, and integrating technical developments from abroad. The first two foci were the basis of the original compact following World War II. The third has become vital as competing centers of research excellence (and research-based innovation ecosystems) have developed around the world.

Most US research universities have straightforward charters that are aligned with these national needs, created to advance the common good through education while making and disseminating contributions to human knowledge. As early as the 1960s, when University of California administrator Clark Kerr struggled with the uses of a modern university and coined the term “multiversity,” it was apparent that citizens, politicians, students, faculty, and university leaders had different and sometimes conflicting expectations about how a research university should advance the common good. Nonetheless, the old compact proved resilient as universities’ perceived relationship to the public good evolved through conflicts over university involvement in defense research through the Vietnam War, the passage of the Bayh–Dole Act in 1980, and the rapid economic globalization that followed the end of the Cold War.

Traditionally, it has been axiomatic that the diversity and decentralization of US research universities are an institutional and national strength. However, because they have all navigated decades of external changes in parallel, competing for the same pots of federal funding, most research universities today are carbon copies of each other. They have similar academic structures, only vague notions of research strategy, and are usually overseen by a decentralized and benevolent administration.

The last 12 months have revealed that both the institutional diversity and the resilience that diversity should provide are largely fiction. As sibling organizations, US research universities are all heavily dependent on federal research funding, and as the current crisis is absorbed at each individual university, it will quickly become a meta-crisis across the entire research system.

Consider that, at the university level, decentralization of research is not a strength. It simply means that leadership has failed to develop research strategies that go much beyond supporting a thousand flowers blooming to get as much federal funding as possible. The results of this follow-the-money strategy by individual universities quickly leads to problems at the national level. For example, the government’s long-term emphasis on life science research has incentivized universities to optimize research staffing, leading to a glut of doctorates—to the point that post-doctoral positions, mostly funded by federal grants, now stretch to a median of more than five years for those applying for faculty positions and “early” career faculty receive their first coveted R01 grant from the National Institutes of Health when they are over 40 years old.

Further, the typical university strategy leaves no mechanism for managing a funding contraction. Thus, when federal research funding falls, every part of a university scrambles to adapt on its own, finding and trying the same partial solutions, so that each university’s research portfolio slowly degrades. University leaders, overwhelmed by the need for intentional and strategic action, resign themselves to accept the situation.

Few leaders of research and/or higher education in the United States would deny that the university research enterprise needs to be updated for twenty-first century levels of global integration and international competition. But amid the system’s seeming successes, reform has not been a priority. And, of course, positive organizational transformation of such a decentralized enterprise is very, very hard.

Ultimately, federal and state policymakers will need to correct the incentive structure facing universities, while university leaders simultaneously act quickly to lay the foundation for the survival of their own research enterprise as they craft a new compact with the government. Universities with the highest level of research activity—R1s—must respond intentionally to the changes in scale of federal funding, constraints on research, and international competition. We believe there are individual and collective actions that research universities can take to assure their own health as well as that of the nation.

### **Strategic university actions require exceptional intentionality**

To begin with, each university needs to map where its research fits competitively within the national system, prioritizing the fields where they can excel. Until now, they have avoided this difficult work to prevent designating winners and losers within universities, which would risk alienating potential funders for orphaned research. However, setting these priorities is necessary to shape the contraction of research activities at every institution. Our view is that failing to make these decisions when resources are contracting, as a tactic to imply “support for everything,” is tantamount to leading the degradation of the whole.

Ideally, this strategy should be built and communicated through a transparent process, rooted in holistic financial

modeling and analysis of the university's research enterprise. As 2025 has taught administrators, institutional priorities will need to be areas where the university is willing to use its limited internal support to weather unexpected swings in federal funding.

Strategic planning should make clear where a university can take advantage of opportunities for new or existing interinstitutional research partnerships. These partnership opportunities could be used either to enhance a strategically important position or to maintain an activity that cannot be justified at scale by a single university. Universities have long talked about such partnerships, usually involving peripheral areas such as teaching low-demand foreign languages. Now is the time to invest in partnerships and extend them to key areas such as high-energy physics or other fields in which individual universities struggle to provide outstanding programs but could do so working in concert. Partnering—including joint degrees and long-term functional mergers—is key to preserving individual university capacity while strengthening a system currently under stress. By embracing strategic partnerships, universities of all sorts across the research enterprise can maintain or increase diversity without degrading the capacity of the whole.

One of the many benefits of universities developing research priorities and clarifying their position in particular fields is that it could help uncover potential sources of research funding from supportive industries or philanthropy. When the university approaches funders, they would have a differentiated vision and specific outcomes that are likely to be more successful than simple requests to prop up a program that is financially overextended.

These strategic transformations will require changes in policies and practices across the university. One sticky domain is intellectual property (IP) policies. With the Bayh–Dole Act, which allows universities to patent innovations from government-supported research, universities see themselves as IP generators and hope for major revenue streams that, in practice, only accrue to a few institutions. As a result, many universities have favored faculty- and student-generated start-up companies over licenses with established companies. Optimizing industry-funded research will require rebalancing the emphasis between IP ownership and industrial support. If federal support declines, faculty may well favor the latter.

In addition, to enable a partial shift to industry funding, universities will need to protect proprietary research. This capability, which may be organizational or physical, is essential for industrial collaborations. However, it brings an advantage in that it can be extended to federally classified research or nonclassified research that is subject to considerable research security protocols.

As universities begin to lean into their strengths and differentiate themselves from one another, most will need to retrench and amplify their core commitment to

teaching undergraduates. There is abundant evidence that undergraduate education can be much richer and more valuable if linked to a university research enterprise, but this is not a natural consequence of simply housing both researchers and undergraduates on the same campus. To fulfill their compact with the federal government and the taxpayer, research universities need to demonstrate to students, parents, and sponsors how research and undergraduate education are mutually reinforcing activities.

Finally, American research universities are among the most globalized US institutions. Despite concerns about research security and foreign espionage, the benefit of cross-border research collaboration and the flow of students, researchers, and faculty to US universities from overseas is overwhelming. The United States' leadership position in global science and engineering is being challenged, not through the theft of technology or IP but because the rest of the world has been investing heavily in research and education for decades. American universities have been at the forefront of making sure that capacity in the United States—a country of just over 340 million people in a world of 8 billion—keeps up with, and leads, that of other developed nations.

US universities need to take this responsibility as seriously as any other mission they pursue. For most of these institutions, this will require a material redirection of international engagement. Accustomed to using earmarked federal support to provide a helping hand to other nations as they increase their research capacity, most US universities will also need to create new mechanisms and engagements to learn from research performed overseas.

To meet this moment, the leaders of the nation's 187 R1 universities must guide their institutions to make difficult decisions, overcoming resistance from faculty who hope for a return to the "good old days." Those days are gone. And while it is easier for presidents and boards to wait and hope, hope is a dangerous strategy for any institution—never mind the country. Leaders must find ways to drive the necessary changes and, by doing so, push their universities to fulfill their unique roles serving the national interest. When federal policymakers do their part to reset the compact with research universities, those universities need to be able to negotiate from a position of strength and self-knowledge.

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