

CIVIC NEWS

What Pennsylvania stands to lose if federal research dollars dry up

Academic institutions across the state face significant challenges as reductions in national science funding threaten economic stability and innovation, an education leader writes.



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PENNSYLVANIA CAPITOL DOME (J. PASSEPARTOUT/WIKIMEDIA COMMONS)

This is a guest post by [Thomas P. Foley](#), a former college president and the current president of the [Association of Independent Colleges and Universities of Pennsylvania](#).

In early March, on behalf of 85 independent nonprofit colleges, I sent a [letter](#) to Congress about the many ways that funding research benefits each one of us. In the weeks since, this topic has exploded across news [headlines](#), as the effects of cuts to the National Science Foundation (NSF) and National Institutes of Health (NIH) become clear.

Your daily routine — even what you’re doing right now, reading an online article — is likely shaped by the innovations born from academic research funded with federal dollars. I could list hundreds of examples for you, many even [pioneered in PA](#), like [WiFi](#) and [Java](#) code, but [simply put](#), according to the MIT Technology Review, “every major technological transformation in the US, from electric cars to Google to the iPhone, can trace its roots back to basic science research once funded by the federal government.”

NIH and NSF funding is a [major](#) economic driver for Pennsylvania. In fact, Pennsylvania [ranks fourth](#) in the nation in winning NIH federal research grants. Local researchers won [\\$1.8 billion](#) in NIH funds last year alone, and just one year of NIH funding in Pennsylvania generates [\\$5.2 billion](#) in economic activity and supports 21,787 jobs. NSF funding amounted to another [\\$332 million](#) for Pennsylvania in fiscal year 2024.

Every one of the 67 counties in Pennsylvania, whether rural or urban, receives research funding through NIH and NSF. Cutting these programs is [estimated](#) to mean a \$27 million loss to Dauphin County (Harrisburg), \$259 million loss to Allegheny County (Pittsburgh), and a \$397 million loss in Philadelphia. Cutting research funding means real dollars that will be pulled out of Pennsylvania's economy.

Education is an export that pays off

Don't sell education short. Higher ed is doing the heavy lifting for our state's economy. One of the nation's biggest exports is education, even [bigger than coal](#), corn and natural gas. The [PA Chamber of Business and Industry](#) found that the 5th largest industry in PA isn't steel – it's higher education.

[Two hundred thousand](#) jobs in PA are supported by the independent nonprofit higher ed sector alone, with thousands more jobs supported by our outstanding trade schools, community colleges and state-owned and state-related colleges.

We've made strides in "[brain gain](#)" here in Pennsylvania, and we changed a Rust Belt narrative into a story of success.

PA is a magnet for talent, [our colleges attract](#) the second highest number of out-of-state college students in the country (considered an economic "export" for the state), and the number of college graduates moving into the state has ticked up ([51% increase in 2023](#) according to Newsweek). Sixteen percent of all American [Nobel Prize](#) winners were affiliated with one of Pennsylvania's independent nonprofit universities and colleges.

We're winning in innovation, and we've made a thriving [ecosystem](#) where university research [fuels](#) businesses and supports startup culture. So why lose all that by reversing course and cutting the research that underpins our state's prosperity?

An impending brain drain

Nationwide, we're looking at potentially [68,000 job losses](#) due to NIH cuts alone, according to the Science & Community Impacts Mapping Project. That doesn't include the unknown [loss](#) in medical breakthroughs or tech innovations that won't happen now without much-needed research.

The losses pile up from there. Universities are [cutting back](#) on their [doctoral programs](#), which means fewer doctors at your local hospital and [fewer researchers](#) working on treatments for diabetes and cancer.

Foreign countries are actively seizing their moment to poach American talent and [lure away](#) our [best and brightest](#) minds ([see: Australia, China, EU, France, Germany, Ireland, Netherlands, Norway, South Korea](#)).

Remember, WWII and the Cold War were fought in labs and lecture halls as well as on battlefields when America was a shining beacon for émigré scientists (see: [Manhattan Project](#), [Project Paperclip](#)).

Tomorrow's [competitive edge](#) can be found today on college campuses where A.I. and drones were first developed, and Pennsylvania's higher ed sector is already a significant contributor to our nation's [defense](#). This isn't about conservative or liberal, Republican or Democrat. In fact, in years past, it was a Republican who pushed for more funding for higher ed and NASA, when President Eisenhower [realized](#) the [competitive advantage](#) of America's universities. Let's not [give away](#) what took so many years to win.