Now is the time for federal, state governments to commit to research funding

Presidents Eli Capilouto and James Ramsey
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A kidney transplant patient free from worrying about anti-rejection medications.

A man working again after successful treatments for Parkinson's disease.

An effort to combat trauma among our returning veterans by forming a partnership between the National Guard and innovative university psychiatrists.

New, cutting-edge cancer trials being made available first to Kentuckians.

These groundbreaking medical and research breakthroughs aren't from laboratories on the east or west coasts or from Ivy League schools.

They are happening in Kentucky at our state's two research institutions -- the University of Louisville and the University of Kentucky. And they are but a few among dozens of examples that carry the potential to change the health and economy of our state.

It's who we are. It's what we do.

But this work that extends and enhances life is potentially threatened because of the debilitating impact of the so-called federal sequester, the across-the-board cuts in funding that are significantly curtailing federal funding of research.

Universities across the United States are urging President Obama and Congress to recommit -- now -- to necessary and fundamental investments in research.

At the same time, it's also critical that our own Commonwealth again commit to help fund basic scientific research that is crucial to moving our economy forward in the 21st century.

What's at stake?

Consider just one example of the impact of basic science research on our economy today: The National Research Council calculated the portion of revenue from 30 well-known computing firms whose technology could be traced back to research supported by government agencies. The total was nearly $500 billion a year.

Technologies and companies whose names are synonymous today with global success -- from the Internet to Google -- had their origins on university campuses. Whole classes of drugs that have
changed health in this country for the better -- like statins, which lower cholesterol -- began with basic scientific research in a university lab.

On the state level, Kentucky took a bold step forward in 1997 by proclaiming its interest in conducting that kind of research with the passage of the Postsecondary Education Improvement Act. It laid the groundwork for reforms and investments through the nationally renowned Bucks for Brains program that allowed UK and UofL to hire hundreds of endowed professors and researchers to both our campuses.

And, later, legislators expanded the program to give both of our institutions the flexibility to use those investments for research facilities as well as human capital.

The simple truth is that talented researchers and clinicians need first-class facilities and laboratory space to do their work. They bring teams of researchers and doctoral students with them. Talent, after all, begets talent. UK and UofL are on the map now in competing for some of the best research talent in the country. That represents an infusion of intellectual talent as well as the economic stimulus of high-paying jobs for our communities.

In the wake of the Great Recession, our state has had to, understandably, delay such investments in research. As our economy improves, though, it's critical that the Commonwealth gets back in the race by investing again, not just in universities generally, but in research that can transform lives and catalyze community advancement.

The impact of not investing again already is being felt -- at our universities and across the country. With the ongoing sequester, for example, universities are being forced to lay off research-related personnel, admit fewer graduate students and delay projects, according to a recent survey of universities.

Francis Collins, director of the National Institutes of Health, the federal agency that funds most health-related research in America, told the Wall Street Journal that "other countries are luring away U.S. scientific talent by offering better opportunities. My greatest concern … is that a whole generation of scientists are looking at this situation and getting increasingly discouraged and disheartened."

Research is incremental. Its progress is built over time, step by step. It can't, as the Wall St. Journal describes, be "turned on and off like a faucet." It requires sustained investment.

At UK and UofL we already are seeing the results of what sustained investment in research can yield -- in cancer, in transplantation efforts, and a host of other treatments and innovations.
However, we can no longer keep delaying or cutting those investments if we want those results to continue.

What choice will we -- as a country and a Commonwealth -- make?

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