Research, Technology Lead to Brighter Future

This op-ed commentary by Dr. Paul Hill, executive director of the West Virginia Experimental Program to Stimulate Competitive Research (WVEPSCoR), appeared in the May 8, 2007, edition of the Charleston Gazette.

I RECENTLY had the opportunity to testify before the U.S. Congress on behalf of the National Science Foundation and NASA. My message to the House of Representatives appropriations subcommittee, chaired by Representative Alan B. Mollohan, D-W.Va., was simple and direct:

Our nation must invest more in research and technology development.

We must utilize the resources in every state.

The decisions — and the future — are in our hands.

This is an important message here at home, too. Research and technology development are essential to our state and national security, as well as to our economic prosperity. For decades, the United States' preeminence in science went unchallenged, but today's world is very different and we face growing competition from around the globe. Every state needs to act immediately to ensure our research base continues to grow, and that we can provide opportunities for students across the country to become first-rate scientists and engineers.

Last fall, I was part of a delegation from West Virginia privileged to attend a meeting in Washington, D.C., of more than 800 of the nation's top scientists and policymakers. The purpose of this special convocation was to discuss and respond to a report titled "Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future." Commissioned by Congress, the report concluded that our country's world economic leadership will erode in the coming years if the United States does not proactively seek to improve the scientific and technological expertise of its workforce. Governor Joe Manchin addressed the gathering, strongly endorsing state-led initiatives to respond to global competitiveness and pledging to implement strategies both in West Virginia and with the National Governor's Association.

During my recent Congressional testimony, I was pleased to tell the members of the subcommittee about the research renaissance underway in our state, and the role played by the Experimental Program to Stimulate Competitive Research.Congress created EPSCoR some 28 years ago to develop research infrastructure in states that traditionally received little federal funding for research. West Virginia was one of five charter states when the program began, and our state has benefited tremendously from its participation. With federal grants as a catalyst, we have been able to greatly expand our state's research capacity.

Perhaps just as importantly, however, the success of the research initiatives enabled by EPSCoR funding has been the impetus for increasing the state's investment in research. Several years ago,



1018 Kanawha Blvd. East Suite 1101 Charleston, West Virginia 25301-2025 the West Virginia Legislature voted to dedicate a portion of the state's racetrack video lottery revenue — approximately \$4 million each year — to the Research Challenge Fund. This investment of state funds for research represented a major step forward for West Virginia, and is already beginning to show results. In just a few years, these Challenge Fund grants have generated more than \$18 million in corporate and federal research grants, and several million dollars more in venture capital.

We are continuing to build on that momentum. Gov. Manchin and the Legislature provided a new line item in the state's budget for next fiscal year. They set aside \$10 million in additional funds to help build the research programs at West Virginia University and Marshall University. Again, this represents an unprecedented state investment in research infrastructure — an investment that will allow us to continue to grow our state's capacity to compete in the new global economy. An additional advantage is that grants from the money in this fund will be linked to economic development goals, so we can ensure the initiatives undertaken contribute to the long-term quality of life for West Virginians.

The federal government also is addressing the competitiveness issue with renewed vigor. On April 25, the U.S. Senate passed the America COMPETES Act (S.761), a bipartisan legislative response to the recommendations in the Rising Above the Gathering Storm report. The bill, if passed by the House, will increase American investment in basic research and improve the teaching of math, science and engineering. Outstanding!

As a nation, we must continue this momentum to meet the challenges facing us. And in West Virginia, although we may not yet have the capacity to compete on the same level as states such as California (Silicon Valley) or North Carolina (Research Triangle), we can, and must, contribute to the national effort to step up our economic and intellectual leadership. Our future depends on it.