

A Time for Unity

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A Time for Unity

Although the US public remains for the most part favorably disposed to scientists, politically inspired efforts to discredit some kinds of science continue and could gain traction during what is likely to be an angry election year. Researchers, especially those working in fields that do not seem to offer the near-term promise of profitable products, have good reason to be apprehensive about their funding. Budget anxieties are driving up pressure on legislators to enact substantial cuts, and the brinksmanship on Capitol Hill suggests that ill-considered measures could be enacted through political grandstanding. Researchers worried about the future of the research enterprise should make efforts to stay informed and be ready to argue for its importance whenever the opportunity arises.

The United States remains the world's research and development leader, investing some \$400 billion per year in public and private funds, yet the rate of growth of that investment is tiny compared with the rate in many other countries. Consequently, between 2002 and 2007, the US share of global R&D (research and development) funding fell by 2.5 percent to 32.6 percent, according to the United Nations Educational, Scientific, and Cultural Organization's Institute for Statistics Data Centre. The European share fell by 2.8 percent to 27.4 percent, and Asia's share increased by more than 5 percent during that interval. US civilian R&D fell as a proportion of the nation's gross domestic product between 2000 and 2009. US science is of high quality, according to citation metrics, but clearly, its continued dominance cannot be assured.

The demonstrated importance of research for economic competitiveness is probably the argument that will carry the most weight in the fights to come, given the economic pain being felt across much of the country. Improvements in health care and technology are universally popular and promise improvements in the standard of living for many. Yet there is another case for research that is just as important. Scientific discoveries strengthen humanity for the long term and globally. They offer the best hope for minimizing the strains already resulting from a growing global population, climate change, and loss of biodiversity. Technological optimists and pessimists may hew to different projections about how the future will unfold, but on the importance of research they agree.

It will serve admirers of science in both of those camps to make common cause in support of research broadly, because otherwise, demagogues who distrust it will exploit the differences in pursuit of their own agendas. Opponents of climate change research, notably, are effectively using this divide-and-conquer strategy to discredit work that should be supported by people of (almost) any political opinion. But similar tactics are evident in other politically charged debates, too. The ethical case for health research is often seen but that for other types of R&D is typically overlooked.

Biologists should be heard loud and clear in the body politic—this year especially. They should be willing to put aside thoughtful differences of emphasis and opinion to support the endeavor they all believe in. The United States, with its strong research infrastructure and tradition of respect for science, has advantages that make it still well qualified to lead.

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