President’s Council Calls for More Competitive Research Grants and a Network of Public-Private Agricultural Institutes to Address Pending Challenges

The Federal Government should launch a coordinated effort to boost American agricultural science by increasing public investments in that economically important domain and rebalancing the U.S. Department of Agriculture’s research portfolio, according to a new report by an independent, presidentially appointed advisory group. The report also calls for the creation of a network of public-private agricultural “innovation institutes,” to leverage the strengths of government scientists and commercial interests.

“Report to the President on Agricultural Preparedness & the Agriculture Research Enterprise,” by the President’s Council of Advisors on Science and Technology, concludes that the United States is the undisputed world leader in agricultural production today, but also cautions that U.S. agriculture also faces a number of challenges that are poised to become much more serious in the years ahead. The report prioritizes the top seven scientific challenges facing agriculture: The need to manage new pests, pathogens, and invasive plants; increase the efficiency of water use; reduce the environmental footprint of agriculture; adapt to a changing climate; and accommodate demands for bioenergy—all while continuing to produce safe and nutritious food at home and for those in need abroad.

“Meeting these challenges will require a renewed commitment to research, innovation, and technology development in agriculture,” said Daniel Schrag, co-chair of the PCAST Agricultural Preparedness Working Group. “If we act strategically today we will gain invaluable benefits tomorrow, including enhanced food security, better nutrition, greener sources of energy, and healthier lives, while we grow the rural economy.”

PCAST notes that the United States is deriving a substantial societal return on its current investments in agricultural research. Based on an analysis of nearly three dozen studies focused on the impact of agricultural research on food, feed, and energy production and on food safety and nutrition over the past several decades, PCAST concludes that the economy has gained at least $10 in benefits for every $1 invested in agricultural research.

But the new report points to two major shortcomings in the current U.S. agricultural research enterprise that place the Nation at risk. First, although competitive grants are widely recognized as having greater innovation potential than grants based on other mechanisms, the proportion of Federal funding for agricultural research allocated through competitive mechanisms is far below the proportion for other fields of research in other science agencies—due in part to longstanding Congressional constraints. Second, the current agricultural research portfolio overlaps too much with private-sector activities while underfunding areas that are not adequately addressed through private efforts—a situation that calls out for a rebalancing of the research portfolio in favor of greater Federal attention to basic, non-commercial research for the public good and workforce development.
The full report can be viewed [here](#); a live webcast of the release event can be viewed [here](#) at 2:30pm ET.

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