



Research Earmarks

Research and Development Funding in the President's 2009 Budget

President Bush challenges Congress to clean up its earmarking practice by implementing a series of reforms that require full disclosure and open debate for any earmark and cutting the total number and cost of all earmarks by at least half. Appropriations bills that defy these conditions will be vetoed and earmarks that are not voted on and approved by Congress will be ignored by their agency. Consistent with this reform effort, the Administration is continuing its strong support for awarding research funds based on merit review through a competitive process refereed by scientists themselves. Such a system has the best prospects for ensuring that the highest quality research is supported. Research earmarks—in general the assignment of money during the legislative process for use by a specific organization or project—are counter to a merit-based competitive selection process that has been a hallmark of American scientific prowess since the post World War II era. However, over the past 20 years, the number of earmarks has risen dramatically and threatens to undermine a vital process underpinning U.S. scientific greatness. Earmarks signal to potential investigators that there is an acceptable alternative to creating quality research proposals that can pass muster with other highly-qualified scientists or engineers. Such an alternative can be an ineffective use of taxpayer funds.

Unfortunately, the practice of earmarking funds to colleges, universities, and other entities for specific research projects returned, and actually expanded, last year. In FY 2008, DoD basic and applied research earmarks total about \$1.1 billion (about 1/5 of the total); \$124 million of the DoE Office of Science is earmarked; and \$83 million in earmarks and unrequested grants seriously dilute the core research and facilities proposed at the National Institute of Standards and Technology. Altogether, research earmarks are estimated at nearly \$2 billion of the \$16.8 billion of overall appropriations earmarks government-wide in FY 2008. This is more than the nominal increase of \$1.8 billion to the Federal Science & Technology budget compared to 2007 and is a real cut in merit-reviewed research. To maximize the effectiveness of federally-funded research, the President calls upon Congress and the academic community to renounce research earmarks.

Some argue that earmarks help spread research money to states or institutions that would receive less research funding through other means. However, The Chronicle of Higher Education has reported that this is not the main role earmarks play. Often only a minor portion of academic earmark funding goes to the states with the smallest shares of Federal research funds. Some proponents of earmarking also assert that earmarks provide a means of funding unique projects that would not be recognized by the conventional peer-review process. To address this concern, a number of research agencies have procedures and programs to reward "out-of-the-box" thinking. For example, the Defense Advanced Research Projects Agency, within the Department of Defense, seeks out high-risk, high-payoff scientific proposals, the National Institutes of Health has established a similarly focused "Pioneer Award," and program managers at NSF set aside a share of funding for higher-risk projects in which scientists and engineers see high potential.

Earmarks for activities that are outside of an agency's mission can detract from an efficient and effective Federal effort on behalf of taxpayers. For instance, in 2008, the Congress has directed DoD to fund research on a wide range of diseases including diabetes, autism, and muscular dystrophy. Funding for unrequested medical research projects in DoD's budget totals about \$800 million in 2008 alone. While research on these diseases is very important, these diseases are not unique to the U.S. military and the research could be better selected, carried out and coordinated within civil medical research agencies without disruption to the military mission. At the same time, intrusion of earmarks into the peer-review processes of civilian medical research agencies would have a significant detrimental impact on ensuring that the most important and promising research is chosen by medical research professionals with access to information on the most promising research opportunities.

Earmarks that divert funding from a merit-based process undermine America's research productivity. The Administration commends Congress for not subjecting NSF and the National Institutes of Health to this debilitating practice. It is now time to end this practice for all R&D programs.