

Behavioral and Social Science in the Administration's FY 2005 Budget

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INTRODUCTION

The National Institutes of Health (NIH), the National Science Foundation (NSF), the Department of Defense (DOD) and the Department of Education (ED) are the primary funders of behavioral and social science research. Lesser but important support for some subdisciplines comes from the National Institute of Justice, the Federal Aviation Administration, NASA, the Centers for Disease Control and Prevention and the U.S. Department of Agriculture. The federal government is the primary sponsor of both basic and applied behavioral and social science research. Highlights of the Fiscal Year (FY) 2005 budget include:

- At NSF, the "Human and Social Dynamics" priority area, which focuses on behavioral and social science research, would receive \$23.4 million in the President's FY 2005 budget, slightly less than in FY 2004.
- At NIH, behavioral and social science research on sexuality and health was reviewed and defended by the NIH Director in response to scrutiny and questions by some members of Congress and the Traditional Values Coalition, a conservative grassroots organization.
- Despite substantial appreciation for the critical role played by applied behavioral, cognitive and social science in helping the military adapt to an ever-changing global environment, DOD investment in this research would be cut by 11.8 percent in the FY 2005 budget.
- The Administration's FY 2005 budget includes a transfer of the Research and Innovation in Special Education account to the Institute of Education Sciences (IES) in the U.S. Department of Education.

NATIONAL INSTITUTES OF HEALTH (NIH) (<http://obssr.od.nih.gov/>)

Growth in the behavioral and social and science research (BSSR) portfolio is slowing, as are many other areas of science, in response to the modest increase for NIH in FY 2004. The outlook for modest growth continues in estimates based on the President’s FY 2005 budget. According to estimates from the Office of Budget growth of BSSR research from FY 2003 to FY 2004 would be approximately \$77.5 million. The increase to FY 2005 would be \$70 million (see Table 1).

Table 1. Behavioral Research and Social Science Research (in millions)
Ten Largest NIH Funders and NIH Total

Participating ICs	FY 03 Actual.	FY 04 Est.	FY 05 Est.
NIMH (Mental Health)	\$440.7	\$454.5	\$466.8
NIDA (Drug Abuse)	410.7	423.1	434.5
NCI (Cancer)	291.9	304.0	314.0
NICHD (Child Health)	288.0	296.7	305.6
NIA (Aging)	267.7	276.2	284.5
NIAAA (Alcoholism)	196.8	203.0	209.0
NHLBI (Heart, Lung, Blood)	119.5	122.8	125.9
NINR (Nursing Research)	105.9	108.0	110.2
NIDDK (Diabetes)	96.9	99.0	101.0
NINDS (Neurological Disorders)	92.4	94.5	95.7
Total NIH (includes other ICs not listed)	2,684.0	2,761.5	2,831.5

Source: NIH Office of Budget estimates.

Information on the amount of BSSR funded by each institute and center (ICs) is collected by the NIH Budget Office as part of what is informally called “the disease list” (a multi-page list of diseases, conditions, etc., for which NIH is required to report its research expenditures to Congress). All NIH ICs fund at least some BSSR in their research portfolios. Although the data collected from the ICs by the Budget Office are less than reliable in specific instances, the trends shown in Table 1 are seen by the ICs as good reflections of their BSSR investments.

Behavioral and social science research is well integrated in most NIH institutes and centers, and it features prominently in NIH multi-institute research programs including Roadmap initiatives on interdisciplinary training and clinical research; minority health disparities; and obesity.

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NIH grants on sexuality and health, most of which are held by behavioral and social scientists, were subject to considerable media and congressional attention this year, when NIH was asked by the House Commerce Committee to explain the public health rationale for funding some 155 projects that appeared on a list originally generated by the Traditional Values Coalition, a grassroots organization. In a response about those grants to congressional leaders, NIH Director Elias Zerhouni, MD, stated, "The constant battle against illness and disease cannot... be limited to biological factors, but must include behavioral and social factors as well. Unhealthy behaviors have been estimated to be the proximal cause of over half of the disease burden in our country. Smoking, overeating, abuse of alcohol and illicit drugs, the spread of sexually transmitted diseases and sex-related or other violent behaviors are at the core of many of the illnesses we are trying to prevent and control in our diverse society today."¹ The controversy does not appear to have influenced the budget for the NIH institutes that fund such research, or the budget for behavioral and social sciences, in general.

The Office of Behavioral and Social Sciences Research (OBSSR) in the OD coordinates research initiatives that are relevant to multiple NIH institutes and centers. OBSSR's appropriation for FY 2003 was \$25.6 million, with a slight increase to \$25.9 million in FY 2004. The proposal for FY 2005 is \$26.3 million, an increase of just 1.5 percent. Research spending on BSSR appears to be decreasing in the OD but the decrease is primarily a result of more accurate reporting (*e.g.* administrative costs are no longer included in OBSSR's total BSSR estimate).

Virginia Cain, a sociologist-demographer, is Acting Director of OBSSR. She has held the position since former director Raynard Kington was appointed Deputy Director of NIH in early 2003. The appointment of a new director for OBSSR is expected by the summer of 2004.

DEPARTMENT OF EDUCATION

(<http://www.ed.gov/rschstat/landing.jhtml?src=rt>)

The Institute of Education Sciences (IES), the federal education research agency, would receive a modest program increase in one of its programs, but proposed structural changes may have more long-term impact than the amount of funds appropriated. Contained in the Administration

¹ The full text of Dr. Zerhouni's letter is at <http://www.cossa.org/CPR/NIHgrantsreviewlettertoCongress.pdf>

proposal are a modest increase for research, development and dissemination; level funding on other spending within IES; and two critical alterations for the agency.

Congress provided increases in FY 2004 that were smaller than the Administration request for that year, and the FY 2005 budget reiterates the Administration's FY 2004 proposed increases. However, the proposed budget would eliminate the long-standing Regional Educational Laboratories program, transferring its functions to the Comprehensive Centers in Title I Grants to Local Educational Agencies. The Administration request also reflects legislative language, pending in both House and Senate bills reauthorizing IDEA, which would transfer Research and Innovation in Special Education to IES.

The need for more and better evidence about what works in education has made research critically important, and the federal role in education research continues to guide the nation's overall education research portfolio. The continued federal focus on improving education results, combined with identification and implementation of research-based programs, is necessary to direct policy and improve education results, close the achievement gap, and wisely use increasingly scarce education resources. However, the Administration FY 2005 budget request would not fulfill funding hopes generated by the reauthorization of the Institute of Education Sciences in 2004. Research would gain \$19.5 million for FY 2005, but would only increase from \$165.5 million to \$185 million.

Contained in the budget is a commitment to support eight national research and development centers. Funds, an expected \$1 to \$2 million for each center, would be available for competing four National Research and Dissemination Centers for five years each on: rural education, postsecondary education, improving low achieving schools, and innovation in education reform. Field-initiated evaluations would also be competed.

Reprising last year's Administration proposal, the Regional Educational Laboratories would not be funded, eliminating a critical link in the research-to-practice continuum. The Administration justified the proposed elimination by citing lack of needed improvement in structure and function and the deficit of high quality research and development products or evidence-based training and technical assistance. The What Works Clearinghouse, focusing on research supporting the No Child Left

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Behind (NCLB) legislation, the National Library of Education and the ERIC clearinghouses would be continued.

The National Center for Education Statistics (NCES) would receive \$91.7 million, identical to FY 2004. NCES would continue the collection, analysis, and dissemination of education-related statistics. The National Assessment of Educational Progress and the National Assessment Governing Board would maintain their on-going activities at the \$94.8 million FY 2004 level. (For more on NCES, see Chapter 22.)

Research and Innovation in Special Education would be maintained at its FY 2004 level of \$78.1 million. It would become a fourth center in IES providing research and dissemination activities germane to special education. (For more on the Department of Education, see Chapter 5.)

NATIONAL SCIENCE FOUNDATION (NSF) SOCIAL, BEHAVIORAL AND ECONOMIC SCIENCES (SBE) DIRECTORATE (www.nsf.gov/sbe)

On March 12, 2004, Norman Bradburn is expected to leave NSF after four years as Assistant Director for the Social, Behavioral and Economic Sciences Directorate (SBE). His tenure has been marked by the development of the Human and Social Dynamics priority area and its acceptance by the NSF hierarchy as an important component of the Foundation's program. The four years have also been a period of frustration as Congress has rejected large proposed spending boosts for the directorate and has continued to allocate directorate funding by percentages that, because of the directorate's small base, make it difficult to achieve significant increases to its funding.

In addition, the Office of International Science and Engineering (OISE), while still included in the SBE funding account, is now a Foundation-wide activity working closely with all the directorates. Funding for OISE includes transfers (\$12.8 million in FY 2003) from the State Department for an award to the U.S. Civilian Research and Development Foundation.

FY 2004 funding for SBE, including OISE, is \$203.8 million, up \$5 million from FY 2003. Without OISE, funding went from \$158.6 to \$175.7 million. For FY 2005, the proposal includes a boost of \$15 million or 8.5 percent for the SBE research and statistics divisions to \$190.7 million. As has happened recently, NSF has provided SBE with the largest percentage increase for any of the research directorates, albeit

still quite small in absolute terms. The OISE would increase from \$28.1 to \$34 million.

Human and Social Dynamics remains a key component of the SBE budget. The first major solicitation for the priority is now in the review process. In FY 2004, funding is \$24.2 million, of which \$15.9 million comes from SBE dollars. For FY 2005, HSD would receive \$23.3 million, with again \$15.9 million from SBE. This Foundation-wide priority includes research support for studies of learning, decision-making, risk assessment, change adaptation, globalization, democratization, and the dynamics of behavior. Funding will also support methodological advances in spatial social science and improved instrumentation and data resources infrastructure.

SBE will also provide support for research on the societal, environmental, and legal impacts surrounding the development of Nanoscale Science and Engineering, another NSF priority. The congressionally enacted Nanotechnology Act of 2003 indicates the importance of examining these impacts. SBE will also conduct a new competition for centers that advance knowledge about Environmental Social and Behavioral Sciences as well as continuing support for centers focusing on Decision Making Under Uncertainty related to climate change, part of the Administration's Climate Change Research Initiative. In addition, the Directorate has a small investment (\$1.5 million) in the Mathematical Sciences initiative to develop new statistical techniques to advance research in the social and behavioral sciences.

The Social and Economic Sciences (SES) division, led by Richard Lempert, would receive \$88.5 million in FY 2005, up from \$81 million in FY 2004. This division has provided support for a large number of the Nobel Prize winners in Economics, including the 2003 recipients, Robert Engle and Clive Granger. In addition to HSD projects, SES will also support activities that will develop, integrate, and utilize large scale social, economic, and demographic databases, investigate social system shocks and extreme events, and examine drivers of social change, such as population shifts, ethnic conflicts, terrorism, technological, economic, and environmental change.

The Behavioral and Cognitive Sciences division will soon have a new leader since Philip Rubin left the Foundation in 2003. Its proposed budget for FY 2005 is \$76 million, up from \$68.5 million in FY 2004,

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and \$62.3 million in FY 2003. Aside from HSD support, the division will continue to fund research on the behavioral and cognitive science of human learning, including the Children's Research Initiative, on human origins and development, and on human-environmental interactions.

The Science Resources and Statistics (SRS) division, led by Lynda Carlson, provides policymakers, researchers, and others with data and analysis for making informed decisions about the nation's science, engineering and technology enterprise. SRS' activities include survey development, methodological and quality improvement research, data collection, analysis, information compilations, and dissemination. After receiving significant increases to complete its every-ten-year redesign of its samples and surveys, funding for FY 2005 is flat. SRS hopes to use some of its funds to continue to participate in efforts through UNESCO and OECD to encourage the development of internationally comparable basic data on S&E personnel and post-doctorates. In addition, it will help provide important information to a new chapter of *Science and Engineering Indicators* focusing on state-supported research and development. (For more on SRS, see Chapter 22.)

In addition to the SBE funding, the proposed budget includes another \$20 million in the Integrated Activities account for Science and Learning Centers, which support learning research in multiple disciplines with appropriate partnerships with academia, industry and other public and private entities at all levels of education.

DEPARTMENT OF DEFENSE (DOD)

(<http://www.dtic.mil/biosys/org/hs.html>)

Driven by its mission focus, the Department of Defense (DOD) supports an enormous research and development (R&D) enterprise. Within the overall R&D account, DOD's basic and applied research portfolio (the Science and Technology or S&T line) includes support for behavioral, cognitive and social science. The majority of this research is funded through intramural and extramural programs within the Army Research Institute (ARI) and Army Research Laboratory (ARL); the Office of Naval Research (ONR); and the Air Force Office of Scientific Research (AFOSR). These military service laboratories conduct and sponsor basic ("6.1"), applied/exploratory development ("6.2") and advanced development ("6.3") research in the human systems area. All of the services fund research in the broad categories of personnel, training and

leader development; warfighter protection, sustainment and physical performance; and system interfaces and cognitive processing. In addition, there are additional, smaller human systems research programs funded through the Office of the Secretary of Defense, the Defense Advanced Research Projects Agency (DARPA), the Marine Corps, and the Special Operations Command.

In FY 2004, DOD had requested \$10.2 billion for DOD's S&T line and the defense authorizers in turn had recommended \$11.1 billion. Appropriators provided \$12.1 billion for S&T in the final FY 2004 bill signed by the President. For FY 2005, the President's budget requests \$10.55 billion for defense S&T, a 12.7 percent decrease from the enacted FY 2004 level. When asked about the cut, DOD staff noted that Administration requests are based on the previous year's request rather than enacted levels of funding. They therefore describe the FY 2005 request not as a decrease, but as a 3.1 percent increase for defense S&T.

Even as the overall S&T account has grown steadily (until this year's Administration request), DOD's investment in behavioral, cognitive and social science within that portfolio has declined. In a report to the Senate Appropriations Committee, DOD noted that these areas of research have "historically been extremely productive" with high return on investment and "high operational impact." Yet total spending on behavioral, cognitive and social science research fell from \$405.0 million appropriated in FY 2003 to \$376.7 million in FY 2004, with the majority of cuts in "6.2" and "6.3" funding. At press time DOD had not made available the levels of funding for human-centered basic research ("6.1" level) programs, but overall applied research in these areas ("6.2" and "6.3" level) would be cut by 11.8 percent. Small investments in DARPA and Marine Corps human systems applied programs would increase, as would the Army's and Navy's "6.3" funding. Large cuts (up to a third of program funding) would hit the Air Force ("6.2" and "6.3" programs), the Army and Navy "6.2" programs, and human systems applied programs funded through the Office of the Secretary of Defense. The need for the research is unlikely to decline, however, since in the current national security climate there will be more, rather than fewer, demands on military personnel, including more rapid adaptation to changing conditions, more skill diversity in units, increased information-processing from multiple sources, and increased interaction with semi-autonomous systems.