

## CONGRESS RETURNS: SPENDING BILLS TOP PRIORITY

With a close presidential contest and control of the next Congress hovering in the background, the 106<sup>th</sup> Congress returned on September 5 for its final month of activity. The Republican leadership hopes to adjourn by October 6 and go home and campaign. However, before then, Congress needs to complete the FY 2001 appropriations process. It hopes to do this before the new fiscal year begins on October 1.

With only two of the thirteen spending bills signed by the President (Military Construction and Defense), Congress and the White House will play the usual end-of-fiscal-year budget games. For the moment, as usual, the President has the upper hand with his veto power that can thwart the desire of congressional leaders to finish and leave. Although the GOP leadership seems willing to make up the \$24 billion difference between what it has provided and what the President wants, the programmatic spending details and policy differences continue to hinder completion of these bills.

The Senate VA, HUD, Independent Agencies Appropriations Subcommittee will try once again the week of September 11 to mark-up its version of the spending bill that includes funding for the National Science Foundation (NSF), as well as NASA, EPA, HUD, and the Department of Veterans' Affairs. During the August recess a number of things occurred that could provide the NSF with a substantial increase close to the administration's requested 17.3 percent. The "Dear Colleague" letter calling for a doubling of NSF's budget in the next 5 years, initiated by Subcommittee Chair Senator Kit Bond (R-MO) and Ranking Democrat Barbara Mikulski (D-MD), continued to gather signatures (see *UPDATE*, July 24, Number 14). In addition, another letter signed by Senate Majority Leader Trent Lott (R-MS) and Senators Spencer Abraham (R-MI), James Inhofe (R-OK), and Robert Bennett (R-UT) was sent to

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## KINGTON NAMED NEW OBSSR DIRECTOR

Raynard S. Kington has been appointed the National Institutes of Health's (NIH) new Associate Director and Director of the Office of Behavioral and Social Sciences Research (OBSSR) by Acting NIH Director Ruth Kirchstein. Kington, who will be the OBSSR's second director, is scheduled to begin his tenure at OBSSR on October 8, 2000. "His broad medical, scientific, and administrative background will serve him well as he directs OBSSR in exploring the role of behavior, lifestyle, and social factors in health promotion and disease prevention," notes Kirchstein in a memo to the NIH Institute and Centers Directors.

A speaker for COSSA's 1996 Congressional Seminar *Aging Well: Health, Wealth, and Retirement*, Kington is currently the Director of the Division of Health Examination Statistics in the Center for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS) where he leads the National Health and Nutrition Survey (NHANES).

Before joining the CDC, Kington was a Senior Natural Scientist at the RAND Corporation and an Assistant Professor of Geriatric Medicine at the University of California, Los Angeles. A Robert Wood Johnson Clinical Scholar at the University of Pennsylvania, he completed his M.B.A. and Ph.D. in

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health policy and economics at the Wharton School. He received his M.D. from the University of Michigan. He was a co-director of the Drew/RAND Center on Health and Aging, a National Institute of Aging Exploratory Minority Aging Center. His research interests have included the economics of aging, health economics, the evaluation of preventive interventions in elderly populations, and the relationships among race, socioeconomic status, and health.

In reaction to the announcement, Norman B. Anderson, the OBSSR's first director, said, "I think Raynard is an excellent choice to lead OBSSR. His broad training, coupled with his diverse research and administrative experiences, make him ideally suited to help NIH move vigorously forward in the social and behavioral sciences. I also know that the [social science community] will embrace and encourage him as it did me." Anderson left the agency earlier this year after five years of successfully working to integrate the social and behavioral sciences throughout the NIH health research enterprise to join Harvard University's School of Public Health as a Professor of Health and Social Behavior.

#### CONSORTIUM OF SOCIAL SCIENCE ASSOCIATIONS

Executive Director:	Howard J. Silver
Public Affairs:	David A. Hess
Government Affairs:	Angela L. Sharpe
President:	Alfred Blumstein

The Consortium of Social Science Associations (COSSA), an advocacy organization for Federal support for the social and behavioral sciences, was founded in 1981 and stands alone in Washington in representing the full range of social and behavioral sciences. *UPDATE* is published 22 times per year. Individual subscriptions are available from COSSA for \$75; institutional subscriptions, \$150, overseas mail, \$150. ISSN 0749-4394. Address all inquiries to COSSA, 1522 K Street, NW, Suite 836, Washington, D.C. 20005. Phone: 202/842-3525, FAX: 202/842-2788.

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## WHITE HOUSE FORUM ADDRESSES CRIME AND TECHNOLOGY

The White House Office of Science and Technology Policy (OSTP) held a crime technology initiative forum on July 25 and 26. A large and diverse crowd of law enforcement officials, technology experts, social science researchers, and interest group representatives was invited to discuss the criminal justice challenges facing the Nation and consider how science and technology could address those challenges. Attorney General Janet Reno, along with several prominent Clinton Administration officials and criminal justice researchers, served as forum speakers.

The theme of the two day conference was the need for a viable criminal justice system. Currently, the system operates more like separate processes with different components of the legal system — police officers, courts and judges, policy makers — not communicating with the others. Many who attended the event noted that the current criminal justice system is disjointed and that a steady and efficacious information flow between different law enforcement agencies, local, State, and Federal court officials, and policy makers is almost nonexistent. Participants, and several speakers, noted the need for a seamless information system that connects the different players in the criminal justice system. Many saw emerging technologies as the answer to allow the free flow of information.

Attorney General Reno delivered an impassioned address on the great challenges facing the United States with respect to crime. She confidently noted that science and technology would have a significant role to play in addressing these challenges. She specifically stressed the need to do more research on determining why people are violent, especially juveniles. While she said that there is some research that addresses this question, she maintained that much more needed to be done. She also pointed to the problem of drug and alcohol abuse among younger Americans, and firmly stated that we need to address this problem. She also noted that the country needs to face the growing use of methamphetamine. We cannot let our country fall under the grip of this drug, she said. The Nation, said Reno, needs to augment its knowledge to address crime and violence.

There is hardly a reason for the Federal government not to invest in research and development to address crime issues, said Representative Sherwood Boehlert (R-NY). Boehlert said that there is currently no high-level Federal approach to bring science and technology to answer the problems of crime. Therefore, he said that the creation of a strong long-term link between researchers, law enforcement officials, and Federal officials should be a national goal. There must be a substantial investment by the Federal government in research and development of crime fighting technologies. The social and behavioral sciences, he said, also need strong Federal commitment and investment.

Alfred Blumstein, Professor at Carnegie Mellon University, Director of the National Consortium on Violence Research (NCOVR), and President of COSSA, spoke about some of the science and technology tasks the country must undertake in the coming years. First, he noted that the Nation must network all crime justice information within and across jurisdictions. All the disparate officials involved in criminal justice must have the capacity to communicate with each other. Second, Blumstein noted that technologies need development so that individuals placed within the community through alternative sentencing can be effectively monitored. Third, scientists need to create mobile gun detection technologies that law enforcement officers can easily carry in their squad cars or on the street. Fourth, DNA detection technologies, according to Blumstein, need further improvement.

The forum was the first in what will likely be a series of meetings discussing crime and how science and technology can be effectively adopted to address a wider array problems.

### **NRC REPORT ASSESSES NATION'S NEED FOR SCIENTISTS**

The National Institutes of Health (NIH) should increase its emphasis on interdisciplinary research training in the behavioral and social sciences, according to the recently released National Research Council (NRC) report *Addressing the Nation's Changing Needs for Biomedical and Behavioral*

*Scientists*. The congressionally-mandated report, the eleventh in a series that began in 1975, reviews the recent production and current supply of scientists.

The report is the result of the NIH's request to the Committee on National Needs for Biomedical and Behavioral Scientists to assess the need for National Research Service Award (NRSA) training grants and fellowships, and the need for new research personnel in biomedical, behavioral, and clinical sciences.

Noting that the report "appears at a time of contradictions," the Committee observes that on one hand, improvements in health resulting from biomedical and behavioral research are increasingly apparent. On the other hand, it is "increasingly difficult for new scientists to establish independent research careers." The report further notes, that "the composition of the research workforce and the focus of its work do not adequately address some of the Nation's needs." The rapidly increasing medically underserved minority populations, and the lack of commensurate growth of the number of research personnel who seek to address their health problems are cited as examples.

### **We Have Enough Ph.Ds. . .**

As requested by NIH, the NRC Committee focused on the three broad fields of biomedical, behavioral, and clinical research. The Committee found that "the number of new Ph.D.s awarded annually in the basic biomedical sciences is well above that needed to keep pace with growth in the U.S. economy and to replace those leaving the workforce as a result of retirement and death." Accordingly, the Committee concluded that research training in these fields should not be increased.

Likewise, the Committee recommended that "there should be no growth in the aggregate number of Ph.D.s awarded annually in the behavioral and social sciences." The Committee notes that "given the current employment opportunities for behavioral and social scientists and the continuing growth forecast in the workforce, the present number of approximately 2,600 new behavioral and social science Ph.D.s per year is sufficient to fulfill anticipated national needs in the near future (until at

least 2005).” In the area of clinical research, the Committee recommend that “Ph.D. production in the clinical science fields not be increased but that efforts to train and retain physicians be intensified until the decline in the numbers has been reversed and the clinical research workforce includes substantially more M.D.s than is now the case.”

### **Behavioral and Social Sciences**

The report emphasizes that “[r]esearch training in the behavioral and social sciences related to health should be expanded beyond traditional disciplinary boundaries and provide opportunities for participating students and fellows to integrate their knowledge of the behavioral and social sciences with advances in the brain sciences (and related fields such as brain imaging, biochemistry, and pharmacology), public health, and medicine.”

To transform behavioral and social science research into a more interdisciplinary activity “is likely to require a concerted effort by the NIH and changes in several facets of its research training programs.” The NRC report recommended several options for the NIH to consider:

- \* Gradually shift the focus of its predoctoral programs from single discipline to interdisciplinary training.
- \* Increase the opportunities for postdoctoral training through interdisciplinary training grants.
- \* Involve more NIH Institutes in behavioral and social science research training, either independently or in joint activities with the Institutes that already support the bulk of this training — National Institute of Child Health and Human Development, National Institute on Aging, National Institute on Drug Abuse, National Institute on Alcohol Abuse and Alcoholism, and the National Institute of Mental Health.
- \* Monitor more closely the implementation of the 1997 policy change for M.D.-Ph.D. programs, to ensure that more students are provided opportunities to pursue studies in the behavioral and social sciences related to medicine.

Noting that Ph.D.s trained in behavioral and social sciences pursue a broader research agenda, much of which is unrelated to health and medicine, the report recommends that the NIH and the

National Science Foundation take steps to improve data on the behavioral and social sciences workforces, so that those conducting health-related research can be specifically identified in national surveys of the scientific workforces.

According to the report, African Americans, Hispanics, and Native Americans are “greatly underrepresented among Ph.D.s and health professionals in the research workforce. Meanwhile, the health problems of the nation’s growing underrepresented minority populations are not receiving adequate attention.” While the Committee acknowledges that the number of underrepresented minority individuals earning Ph.D.s in behavioral and social sciences has increased substantially in recent years, the Committee recommends that the NIH continue its effort to identify and support programs that encourage and prepare underrepresented minority students for careers in behavioral and social science research.

In discussing crosscutting issues in research training, the Committee further recommends that “[l]ed by the NIH, the agencies with responsibility for health research training should strengthen their efforts to ensure diversity in the research workforce.” NIH, the Agency for Healthcare Quality and Research, and the Health Resources and Services Administration are urged to focus their attention on improvements in opportunities for minorities at the secondary school level (or earlier), seeking legislative authority to do so, if necessary. The report notes that although “these agencies have not traditionally played a role in secondary education, we believe that their responsibility for ensuring diversity in the research workforce necessitates that they do so.”

### **Dissenting View Provided**

John F. Kihlstrom, from the University of California, Berkeley and a member of the NRC Committee, provided a personal statement regarding research training in the behavioral and social sciences, which is included in the Appendix of the report. Kihlstrom notes that while he generally agrees with the findings, conclusions, and recommendations of the Committee, he believes “that the Committee has not fully considered the

actual and potential contributions that the behavioral and social sciences can make to health and health care, and the implications of these contributions for the National Research Service Award training program and related training activities sponsored by NIH, AHRQ, and HRSA.”

In his statement, Kihlstrom outlines contributions of the behavioral and social sciences to health and health care. He uses the role of behavioral and social sciences in combating HIV/AIDS as an example. “Almost two decades after identification of AIDS (in 1981) and the isolation of the HIV virus (in 1983) and extensive biomedical research, there is still no cure and no vaccine. Nevertheless, psychosocial interventions, taking account of both the determinants of individual behavior and the wider sociocultural context in which individual behavior takes place, have effectively reduced the incidence of HIV-related sexual risk behaviors.” Kihlstrom further emphasizes that ““altering behavior”” through targeted education, peer influence and community action, advertising, and marketing remains ““the primary way to control the epidemic of HIV/AIDS.””

He also declares that “across a wide variety of chronic and life-threatening diseases, from asthma and hypertension to epilepsy and renal disease, compliance with prescribed medical regimens is universally acknowledged to be a central problem for health care professionals.” He also notes that the “situation is just as bad, if not worse, for compliance with such disease prevention regimes as diet and exercise. The problem of compliance underscores the fact that developing a pill is only one step toward effective treatment or prevention. . . . This is a behavioral problem that must be addressed at the individual and sociocultural levels of analysis,” stresses Kihlstrom.

Disagreeing with the Committee’s decision “not to repeat or reinforce its predecessors’ calls for increases in NRSA awards in the behavioral and social sciences,” Kihlstrom notes that with the establishment of the Office of Behavioral and Social Sciences Research, “NIH has taken an important step forward in recognizing the contributions of the behavioral and social sciences to health and health care and in promoting these fields within the

institutes.” The agency and the Department of Health and Human Services (HHS), says Kihlstrom, “can and should do more.”

### **“PROMOTING HEALTH: INTERVENTION STRATEGIES FROM SOCIAL AND BEHAVIORAL RESEARCH”**

“By itself, . . . biomedical research cannot address the most significant challenges to improving the public’s health in the new century,” says a recent Institute of Medicine (IOM) Study *Promoting Health: Intervention Strategies from Social and Behavioral Research*. “Behavioral and social interventions therefore offer great promise to reduce disease morbidity and mortality, but as yet their potential to improve the public’s health has been relatively poorly tapped,” found the IOM Committee on Capitalizing on Social and Behavioral Research to Improve the Public’s Health charged to “help identify promising areas of social science and behavioral research that may address public health needs.”

The IOM report recognizes that health because health is a complex issue and because interventions need to be similarly complex the science underpinning this work must integrate the work of many disciplines and professions, including: medicine, nursing, psychology, sociology, anthropology, engineering, economics, political science, biology, history, law, and demography, among others

According to the report, the committee examined a wide range of social and behavioral research intended to promote the health and well-being of individuals, their families, and their communities, and “found an emerging consensus that research and intervention efforts should be based on an ecological model.”

The ecological model, according to the committee, assumes that differences in levels of health and well-being are affected by a dynamic interaction between biology, behavior, and the environment, an interaction that unfolds over the life course of individuals, families, and communities. The model also “assumes that age, gender, race,

ethnicity, and socioeconomic differences shape the context in which individuals function, and therefore directly and indirectly influence health risks and resources.” These demographic factors, says the committee, are “critical determinants of health and well-being and should receive careful consideration in the design, implementation, and interpretation of the results of interventions.”

### **Behavior Change: A Difficult and Complex Challenge**

The report emphasizes that to prevent disease, individuals are increasingly asked to do things that they have not done previously, to stop doing things they have been doing for years, and to do more of some things and less of other things. The IOM committee notes that “it is unreasonable to expect that people will change their behavior easily when so many forces in the social, cultural, and physical environment conspire against such change.” If successful programs are to be developed to prevent disease and improve health, attention must be given not only to the behavior of individuals, but also to the environmental context within which people live.

### **Recommendations**

The Committee makes two overarching recommendations:

**Recommendation 1:** Social and behavioral factors have a broad and profound impact on health across a wide range of conditions and disabilities. A better balance is needed between the clinical approach to disease, presently the dominant public health model for most risk factors, and research and intervention efforts that address generic social and behavioral determinants of disease, injury, and disability.

**Recommendation 2:** Rather than focusing interventions on a single or limited number of health determinants, interventions on social and behavioral factors should link multiple levels of influence (i.e., individual, interpersonal, institutional, community, and policy levels).

Evidence of the relationship between psychosocial and behavioral factors and health is large and growing, observes the report. The report further notes that “evidence indicates that many

social and behavioral interventions have biological consequences, rather than acting primarily indirectly through such channels as health behaviors. . . . Social and behavioral interventions may enhance health because they decrease psychological stress, improve mental health, alter chronic life strains, improve health behaviors, and/or enhance social support or social connectedness; indeed, the most successful interventions have positive benefits across this spectrum, rather than within any single sphere.”

The report contains nine “research” recommendations which are listed below.

- 1:** Better understand psychosocial and biobehavioral mechanisms that influence health.
- 2:** Understand the pathway through which behavioral and social factors affect pregnancy outcomes, and address the issues of women’s health across the life span and across generations.
- 3:** Extend research on early childhood interventions to provide information useful to tailoring such interventions to ensure the least costly, most effective strategies for a variety of populations. Expand and integrate both theory and research to include a full array of child outcomes (e.g., physical health as well as social, cognitive, and emotional outcomes) and the effect of interventions on these outcomes.
- 4:** Identify sources of health strengths and resilience, as well as health risks, among individuals, families, and communities of low socioeconomic status and racial and ethnic minority groups.
- 5:** Identify pathways through which social contexts directly and indirectly affect disease pathogenesis and outcomes.
- 6:** Evaluate legal and regulatory interventions to ensure that these achieve their intended effects without imposing undue burdens on individuals or society.
- 7:** Expand methodologies to address a broad range of research questions, and to respond to complex multilevel interventions. This includes the need to integrate both qualitative and quantitative research.
- 8:** Develop cost-effective analyses to assess the public health utility of interventions over time. These analyses should consider the broad influence and costs of interventions to target individuals, their families, and the broader social systems in which they operate.

**9:** Develop the next generation of prevention interventions that derive from the communities' assessments of their needs and priorities and build relationships with those communities. Create models that encourage members of the community and researchers to work together to design, train for, and conduct such programs.

The report acknowledges that to implement the recommendations in the report, "significant changes in the manner in which health services and research funding are allocated will be required." According to the report, the National Institute of Child Health and Human Development and the National Institute on Aging perhaps come closest to what is needed because their mission allows for simultaneous consideration of several related diseases associated with human development and aging. The IOM committee's findings, concludes the report, "demonstrate the importance of prevention efforts that are based on the reality that many diseases have numerous risk factors in common and that interventions programs are most effective when they deal with this commonality."

### **CONGRESS RETURNS (cont.)**

Senate Appropriations Committee Chairman Ted Stevens (R-AK) and Ranking Democrat Robert Byrd (D-WV). This letter noted the Bond-Mikulski effort calling it "a laudable goal" and urged the appropriations' leaders to fund NSF "at levels sufficient to achieve this goal." Senator Stevens has already signed on to the Bond-Mikulski letter. So it appears that the "stars" are aligned for NSF, at least on paper.

The Labor, HHS, Education bill has emerged from a House-Senate conference committee. The President has vowed to veto the bill as it now stands. The conferees did provide the National Institutes of Health (NIH) with a \$2.7 billion or 15 percent increase, keeping NIH on its doubling track. However, the White House objects to funding levels for various programs including school construction and teacher accountability and to language blocking the implementation of workplace ergonomic standards.

The Agriculture and Rural Development spending bill is in conference. What to do about sanctions on Cuba is the major issue preventing completion of the legislation. The White House is unhappy with the funding levels for research. The Commerce, Justice, State spending bill has not passed the Senate yet. It includes funding for the Census, National Institute of Justice (NIJ), and the Bureau of Justice Statistics. The House version greatly reduces criminal justice research and fails to fund some of the administration's priorities, while the Senate Appropriations Committee-passed bill increases that funding, particularly for the NIJ. The Interior bill which funds the National Endowment for the Arts and the National Park Service (which has a small social science research program) is also in conference. The National Endowment for the Humanities (NEH) will get a nearly \$5 million increase, if the Senate numbers prevail.

With the focus on the appropriations bills, there should be little time for anything else. The Senate is committed to a vote extending Permanent Normal Trade Status to China. Beyond that, many pieces of legislation, the Elementary and Secondary Education Act, the reauthorization of the Office of Educational Research and Improvement, juvenile justice and gun control, NSF reauthorization, all face postponement until the 107<sup>th</sup> Congress convenes in 2001 in what may be very different political circumstances.

### **NSF SEEKS ASSISTANT DIRECTOR FOR EHR DIRECTORATE**

The National Science Foundation recently announced that it is seeking nominations (including self) for Assistant Director for Education and Human Resources. The position provides leadership and direction to NSF programs aimed at improving education in science, mathematics, engineering, and technology.

Recommendations, including any supporting information, should be sent by October 13, 2000 to: AD/EHR via email (ehsrch@nsf.gov), or to the following address: NSF, Office of the Director, Suite 1205, 4201 Wilson Blvd, Arlington, VA, 22230. For more information: <http://www.nsf.gov>.