

Angela L. Sharpe, Consortium of Social Science Associations, (202) 842-3525 (alsharpe@coffa.org)
**Statement of the Coalition for the Advancement of Health Through Behavioral and Social Science Research (CAHT-BSSR) on FY 2011 Funding for the National Institutes of Health submitted for the record to the Subcommittee on Labor, Health and Human Services, Education and Related Agencies, Committee on Appropriations, U.S. House of Representatives
The Honorable David Obey, Chair, April 16, 2010**

Mr. Chairman and Members of the Subcommittee, the Coalition for the Advancement of Health Through Behavioral and Social Science Research (CAHT-BSSR) appreciates and welcomes the opportunity to comment on the Fiscal Year (FY) 2011 appropriations for the National Institutes of Health (NIH). CAHT-BSSR includes 13 professional organizations, scientific societies, coalitions, and research institutions concerned with the promotion of and funding for research in the social and behavioral sciences. Collectively, we represent more than 120 professional associations, scientific societies, universities, and research institutions.

CAHT-BSSR would like to thank the Subcommittee and the Congress for its continued support of the National Institutes of Health. Strong sustained funding is essential to national priorities of better health and economic revitalization. Providing adequate resources in FY 2011 that allows the NIH to keep up with the rising costs of biomedical, behavioral, and social sciences research will help NIH begin to prepare for the era beyond recovery. It is essential that funding in FY 2011 and beyond allow the agency to resume steady, sustainable growth and allow for fulfilling the President's vision of doubling our investment in basic research. **Accordingly, CAHT-BSSR joins the Ad Hoc Group for Medical Research in its request for \$35 billion in funding for NIH in FY 2011.** This level of funding will sustain America's enhanced medical research capacity. It also represents the new functional capacity funded by annual appropriations and the historic American Recovery and Reinvestment Act (ARRA).

NIH Behavioral and Social Sciences Research -- NIH supports behavioral and social science research throughout most of its 27 institutes and centers. The behavioral and social sciences regularly make important contributions to the well-being of this nation. Due in large part to the behavioral and social science research sponsored by the NIH, we are now aware of the enormous contribution behavior makes to our health. At a time when genetic control over diseases is tantalizingly close but not yet possible, knowledge of the behavioral influences on health is a crucial component in the nation's battles against the leading causes of morbidity and mortality: obesity, heart disease, cancer, AIDS, diabetes, age-related illnesses, accidents, substance use and abuse, and mental illness.

As a result of the strong Congressional commitment to the NIH in years past, our knowledge of the social and behavioral factors surrounding chronic disease health outcomes is steadily increasing. The NIH's behavioral and social science portfolio has emphasized the development of effective and sustainable interventions and prevention programs targeting those very illnesses that are the greatest threats to our health, but the work is just beginning.

The grandest challenge we face is understanding the brain, behavior, and society -- from global warming to responding to short term pleasures; from self destructive behavior, such as addiction, to life style factors that determine the quality of life, infant mortality rate and longevity. Nearly 125

million Americans are living with one or more chronic conditions, like heart disease, cancer, diabetes, kidney disease, arthritis, asthma, mental illness and Alzheimer's disease. Significant factors driving the increase in health care spending in the United States are the aging of the U.S. population, and the rapid rise in chronic diseases, many caused or exacerbated by behavioral factors: for example, obesity, caused by sedentary behavior and poor diet; addictions and resulting health problems caused by tobacco and other drug use. Behavioral and social sciences research supported by NIH is increasing our knowledge about the factors that underlie positive and harmful behaviors, and the context in which those behaviors occur.

CAHT-BSSR applauds the NIH's recognition that the "scientific challenges in developing an integrated science of behavior change are daunting." We especially commend the **new basic behavioral and social science research trans-NIH initiative, *Opportunity Network for Basic Behavioral and Social Sciences Research (OppNet)*, being undertaken by the NIH** to examine the important scientific opportunities that cut across the structure of NIH and designed to look for strategic opportunities to build areas of research where there are gaps and that have the potential to affect the missions of multiple institutes and centers. Research results could lead to new approaches for reducing risky behaviors and improving health.

Likewise, we commend the designation of the "**Science of Behavior Change**" Roadmap Initiative included in the third cohort of research areas for the Common Fund. We agree with the goals of this Roadmap Pilot to "establish the groundwork for a unified science of behavior change that capitalizes on both the emerging basic science and the progress already made in the design of behavioral interventions in specific disease areas. By focusing basic research on the initiation, personalization, and maintenance of behavior change, and by integrating work across disciplines, this Roadmap effort and subsequent trans-NIH activity could lead to an improved understanding of the underlying principles of behavior change. This should drive a transformative increase in the efficacy, effectiveness, and (cost) efficiency of many behavioral interventions."

With the recent passage of health care reform legislation, there has been the accompanying and appropriate attention to the issue of **personalized health care**. CAHT-BSSR believes that personalization needs to reflect genes, behaviors, and environments. And as the agency has acknowledged with its recent support of the Science of Behavior Change initiative, assessing behavior is critical to helping individuals see how they can improve their health. It is also critical to helping health care systems see where it needs to put resources for behavior change. Fortunately, the NIH acknowledges the need to focus less on finding the "magic answer" and, at the same time, recognizes that health care is different from region to region across the country. Full personalization needs to consider the environmental, community, and neighborhood circumstances that govern how individuals' genes and behavior will influence their health. For personalized health care to be realized, we need a sophisticated understanding of the interplay between genetics and the environment, broadly defined.

CAHT-BSSR applauds the NIH's recognition of a unique and compelling need to promote **diversity in health-related research**. The agency expects these efforts to lead to: the recruitment of the most talented researchers from all groups; an improvement in the quality of the educational and training environment; a balanced perspective in the determination of research priorities; an improved ability to recruit subjects from diverse backgrounds into clinical research; and an improved capacity to address

and eliminate health disparities. Numerous studies provide evidence that the biomedical and educational enterprise will directly benefit from broader inclusion.

NIH recognizes that developing a more diverse and academically prepared workforce of individuals in S.T.E.M. disciplines will benefit all aspects of scientific and medical research and care. CAHT-BSSR applauds the agency its recognition that to remain competitive in the 21st century global economy, the nation must foster new opportunities, approaches, and technologies in math and science education. This recognition extends to the need for a coordinated effort to bolster **science, technology, engineering, and math (S.T.E.M.)** education nationwide, starting at the earliest stages in education. We applaud the agency for its use of ARRA funds to support research designed to strengthen and enhance efforts to attract young people to biomedical and behavioral science careers and to improve science literacy in adults and children.

CAHT-BSSR also commends the NIH for commissioning the **Institute of Medicine (IOM) study of LGBT (lesbian, gay, bisexual, and transgender) health issues, research gaps and opportunities**. LGBT populations are among those for whom little or no national-level health data exist resulting in significant gaps in knowledge and research on LGBT health. At the same time, multidisciplinary research has begun to identify important sexual orientation and gender identity-related health concerns and disparities. The IOM study is a step in the right direction to begin to address many of the research challenges this issue presents, including methodological limitations. The study could examine the best methodological practices for investigating health concerns in LGBT communities. It also provides the opportunity for the development of a strategic plan for the NIH to investigate and address the health concerns of LGBT people. At the very least, the IOM study could examine the current state of knowledge on LGBT health, including general health concerns and health disparities.

NIH Office of Behavioral and Social Sciences Research

The NIH Office of Behavioral and Social Sciences Research (OBSSR), authorized by Congress in the NIH Revitalization Act of 1993 and established in 1995, serves as a convening and coordinating role among the institutes and centers at NIH. In this capacity, OBSSR develops, coordinates, and facilitates social and behavioral science research agenda at NIH; advises the NIH director and directors of the 27 Institutes and Centers; informs NIH and the scientific and lay publics of social and behavioral science research findings and methods; and trains scientists in the social and behavioral sciences. **For FY 2011, CAHT-BSSR supports a budget of \$41.32 million for OBSSR commensurate with the Administration's request of \$38.2 million for the Office and the scientific community's request for the NIH as a whole.**

To achieve its vision of bringing together the biomedical, behavioral, and social sciences research communities to work towards solving the most pressing health challenges faced by society, OBSSR is expanding its efforts to promote and support social and behavioral science research in four areas: 1) problem-based research; 2) basic science; 3) systems-thinking approaches to population health; and 4) interdisciplinary team science. Given the NIH's focus on gene and environment interaction, new leading edge research examining how social and behavioral factors change or alter the actions of genes to influence health and disease is needed.

OBSSR focuses on cross-cutting behavioral and social research issues (e.g. “Long-term Maintenance of Behavior Change”) using its modest budget to seed cross-institute research initiatives. OBSSR has spurred cutting edge research in areas such as measures of community health, including new community-based participatory programs supporting intervention research methods to disease prevention and health promotion in medically underserved areas; socioeconomic status; health literacy; and new methodology development.

In FY 2011, OBSSR, in addition to continuing to support cross-cutting behavioral and social science research issues intends to address the issue of **health literacy**. Low health literacy is a wide spread problem, affecting more than 90 million adults in the United States, where 43 percent of adults demonstrate only the most basic or below-basic levels of prose literacy. Low health literacy results in patients’ inadequate engagement in decisions regarding their health care and can hinder their ability to realize the benefits of health care advances. Research has linked low or limited health literacy with such adverse outcomes as poorer self-management of chronic diseases, fewer healthy behaviors, higher rates of hospitalizations, and overall poorer health outcomes. These situations hamper the effectiveness of health professionals’ efforts to prevent, diagnose and treat medical conditions, and limit many health care consumers’ abilities to make important health care decisions.

The following research cited in the *Achievements of the Social And Behavioral Sciences: Improving Health at Home and Abroad* compiled by the OBSSR further illustrates why behavioral and social sciences research is a critical component in generating scientific knowledge to prevent, treat or cure illnesses or enhance health in a broader context.

Understanding the Links Between Social and Cultural Factors and Health: Social scientists have made significant strides in shedding light on the basic social and cultural structures and processes that influence health. Social and cultural factors influence health by affecting exposure and vulnerability to disease, risk-taking behaviors, the effectiveness of health promotion efforts, and access to, availability of, and quality of health care. Social and cultural factors also play a role in shaping perceptions of and responses to health problems and the impact of poor health on individuals' lives and well-being. In addition, such factors contribute to understanding societal and population processes such as current and changing rates of morbidity, survival, and mortality.

Transforming Health and Health Care - Even with the dramatic contributions that behavioral and social sciences research has made to date, much more needs to be done to understand the role of behavioral and social factors in disease and to use that knowledge to improve the Nation’s health. There is strong evidence that half of all deaths in the U.S. can be attributed to behavioral factors such as smoking, poor diet, and physical inactivity. In addition, behavioral and social factors contribute to the staggering costs of preventable morbidity and mortality. Undoubtedly, biomedical discoveries like the mapping of the human genome have transformed medicine over the past 20 years. Breakthroughs in the behavioral and social sciences over the next 20 years will be critical to address our most pressing public health challenges and to transform health care.

Gene by Environment Interactions - The longstanding debate about nature versus nurture has been turned on its head. Scientists now recognize that it is not a question of genes or environment, but rather, how genes and environment interact in complex ways to explain virtually every observable trait. Take the link between stress and depression: recent research has demonstrated that genetic

vulnerability plays a key role in explaining why stressful life events result in depressive symptoms, diagnosable major depression, and suicide attempts among some individuals but not others. In the same way that “personalized medicine” may tailor medical treatment based on an individual’s genetic makeup, behavioral and social science interventions will also benefit from a more sophisticated understanding of the interactions among genetic, personal, and environmental factors in human behavior.

Improving Mental Health - Over the past 30 years, our understanding of the bio-behavioral mechanisms and treatment of mental disorders has advanced dramatically. Effective and cost-effective therapies that combine behavioral and pharmacological treatments are now available for treatment of depression, anxiety disorders, and the abuse of nicotine, alcohol and other drugs.

Reducing the Health Burden of Poverty - Discoveries in the behavioral and social sciences can inform life-saving environmental and policy changes. One example is the PROGRESA study (Programa Nacional de Educacion, Salud, y Alimentacion), an anti-poverty program begun in 1997 that provides aid to 2.6 million poor Mexican families. This study is comprised of an impressive collaboration across disciplines including biomedical, social/behavioral sciences, economics, epidemiology, and demography. The results have been dramatic, showing that the trajectory of health outcomes associated with poverty may be altered within a generation. The PROGRESA intervention was associated with better growth and lower rates of anemia in low-income, rural infants and children in Mexico. This large-scale, real-world study has demonstrated that antipoverty programs that combine education, health, and nutrition interventions can improve the capacity of families to pull themselves out of poverty and adverse health effects that often ensnare generations.

Preventing Diabetes - For many years, scientists believed that medication was the only tool to prevent and treat diabetes. The Diabetes Prevention Program demonstrated that lifestyle interventions – modest weight loss and regular physical activity – can reduce the risk of developing type 2 diabetes in high-risk adults by 58 percent, compared to 31 percent reduction with diabetes medication. These findings led to "Small Steps, Big Rewards", the first national diabetes prevention campaign.

Increasing Life Expectancy and Quality of Life - In the last century, life expectancy has extended by an astounding amount—from 47 years in 1900 to 77.5 years in 2003. While medical advances increasingly contribute to living longer and healthier lives, the vast majority of improvements in the quality of life have come from changes in our social, economic, and physical environments.

CAHT-BSSR would be pleased to provide any additional information on these issues. Below is a list of coalition member societies. Again, we thank the Subcommittee for its generous support of the National Institutes of Health and for the opportunity to present our views.

CAHT-BSSR

**American Educational Research Association
American Psychological Association
American Sociological Association
Association of Population Centers
Center for the Advancement of Health
Consortium of Social Science Associations
Council on Social Work Education**

**Federation of Associations in Behavioral &
Brain Sciences
National Association of Social Workers
Population Association of America
Society for Behavioral Medicine
Society for Research in Child Development
The Alan Guttmacher Institute (AGI)**

Coalition for the Advancement of Health Through Behavioral and Social Sciences Research