

APS Calls for Change in Behavioral Science at NIH

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The Obama Administration has hit the ground running, and Washington is awash in change. Well before the inauguration, the then President-Elect set up a transition team for the National Institutes of Health (NIH), one of several such teams that are examining agency policies and priorities in depth. These teams will be enormously influential in shaping the agenda for the federal government for some time to come.

The NIH team asked the scientific community to tell them what we think NIH priorities should be. APS's recommendations were to advance a new model of health that grounds prevention efforts in behavior and to support basic behavioral research at NIH. The full APS statement follows. We'll keep you informed about the new Administration's policies regarding behavioral science in particular and science in general in upcoming issues of the Observer.

Memorandum

To: Members of the Obama NIH Transition Team

From: Alan G. Kraut, Executive Director
Association for Psychological Science

Re: Supplemental Funding for NIH; Appointment of an NIH Director; Behavioral Research at NIH

Thank you for your strong support of science and research. We appreciate the opportunity to give you our thoughts on improving our Nation's health and well-being.

As a member of the Ad Hoc Group for Medical Research we recommend that at least \$1.2 billion be included in the pending stimulus package for NIH, and that the appointment of an NIH Director be a priority. Increased funding and stable leadership at NIH are essential to advancing the public's health and well-being through science.

Further, given the strong connections between health and behavior, we ask that support for behavioral research be a priority both in funding allocations and in the search for the new NIH Director. The importance of behavior in health has been well documented, and the need to establish appropriate scientific leadership for this field at NIH has been repeatedly urged by Congress over the past several years. A brief discussion of these issues is provided below.

The Connection Between Health and Behavior

Many leading health conditions — such as heart disease; stroke; lung disease and many cancers; obesity; AIDS; suicide; teen pregnancy; drug abuse and addiction; depression and other mental illnesses;

neurological disorders; alcoholism; violence; injuries and accidents — originate in behavior and can be prevented or controlled through behavior. For example, a conclusive body of research establishes the direct link between stress and health problems: chronic stress accelerates not only the size but also the strength of cancer tumors; chronic stressors weaken the immune system to the point where the heart is damaged, paving the way for cardiac disease; and children who are genetically vulnerable to anxiety and who are raised by stressed parents are more likely to experience greater levels of anxiety and stress later in life.

There is no longer any doubt that behavior directly affects health; we must continue to understand how and why. We need to identify and understand health-enhancing and health-impairing behaviors and improve disease prevention. The kinds of questions behavioral scientists ask include: What are the best ways to manage diabetes and arthritis? How do genes and the environment influence behavioral traits such as aggression and anxiety? What goes into the decision to avoid risky sex? What is the best combination of cognitive behavioral therapy and pharmacological treatment for depression? How can we use virtual reality environments to lessen the effects of post-traumatic stress disorder?

Prevention and Health: Changing Behavior

The Centers for Disease Control and Prevention has concluded that “the United States cannot effectively address escalating health care costs without addressing the problem of chronic diseases.” The Milken Institute estimates the annual economic impact of preventable chronic diseases on the U.S. economy to be more than \$1 trillion. Fully 75% of our current healthcare spending goes toward chronic conditions, the vast majority of which could be better prevented or managed. It has been estimated that if we can reduce obesity and smoking in this country, we’d save \$60 billion over the next 15 years (*An Unhealthy America: The Economic Burden of Chronic Disease*, The Milken Institute and Partnership to Fight Chronic Disease, 2007).

Americans know they need to stop smoking, eat better, and exercise to be healthy, but we continue to engage in detrimental behaviors that compromise our health and well being. In the old view of health, changing behavior was thought to be a matter of willpower or moral fortitude. Through research, we now know that behavior involves a host of factors, including psychological, social, and environmental attributes, and that changing behavior requires research into these factors, which form the connections between health and behavior.

Using Behavioral Research to Improve Health and Well Being

Prevention needs to be more than a buzzword; effective health promotion strategies must be grounded in scientific understanding of how people process information and make decisions. Here is one illustration: Researchers in the field of decision science research examine the cognitive, emotional, and social factors that influence judgment and choice, and how judgment and decision-making can be predicted and improved. This research plays a central role in health education by identifying the most effective ways to frame messages that will encourage behavior change. For example, fundamental cognitive research has shown that for certain kinds of prevention efforts, public health information is best conveyed in a “gain-framed” message (e.g., “if you regularly apply sunscreen you’ll help prevent skin cancer,” versus “if you don’t apply sunscreen, you increase your risk for skin cancer”), whereas early detection strategies should be conveyed in a “loss-framed” way (e.g., “if you don’t get a mammogram, tumors can’t be

detected early, and the later the detection of cancer, the fewer the treatment options.”). This finding has been the basis for a new generation of tailored health-related public service messages that advance the goal of encouraging people to protect their health.

NIH Support of Basic Behavioral Science

A broad spectrum of support for basic behavioral science across NIH is necessary for a vital health research enterprise. To address questions of who is most at risk for chronic illness and how to motivate those people to take appropriate preventive measures and to take advantage of early detection procedures; and of what interventions will be most successful with which individuals, we must first know more about the subtle and complex ways that biology, behavior, and environment jointly determine the likelihood that any one of us will develop a chronic illness or be successfully treated for it. The National Institute of Mental Health (NIMH) has been the traditional home for basic behavioral science at NIH. In recent years, NIMH has gradually reduced its support of these kinds of questions in favor of more applied research. Without a stable infrastructure of support, programs of research in fundamental behavioral phenomena such as cognition, emotion, psychopathology, perception, and development, will continue to languish. It is precisely this kind of foundational work that mission-oriented Institutes need in order to develop behavioral interventions and treatments that address specific conditions. One natural home for this research, as the National Academy of Sciences and the Institute of Medicine have recommended, is the National Institute of General Medical Sciences, NIH’s “basic research” institute. Both chambers of Congress have been asking NIGMS for many years to heed this recommendation.

We respectfully ask you to ensure that behavioral research receives the recognition and support needed to address behavior-based health problems in this nation. Specifically, we ask you to help make behavioral research more of a priority at NIH both by providing maximum funding for NIH overall and by supporting a model of health that includes behavior in its scientific priorities.