

**U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON SCIENCE AND TECHNOLOGY
SUBCOMMITTEE ON RESEARCH AND SCIENCE EDUCATION**

HEARING CHARTER

The Role of Social and Behavioral Sciences in Public Health

**Thursday, September 18, 2008
10:00 a.m. – 12:00 p.m.
2318 Rayburn House Office Building**

1. Purpose

The purpose of the hearing is examine the role of the social, behavioral and economic sciences in improving our Nation's health and well being and reducing the economic burden of health care.

2. Witnesses:

- **Dr. Lisa Feldman Barrett** is a Professor of Psychology and Director of the Interdisciplinary Affective Science Laboratory at Boston College, with appointments at Harvard Medical School and Massachusetts General Hospital.
- **Dr. John B. Jemmott III** is the Kenneth B. Clark Professor of Communication at Annenberg School of Communication, and a Professor of Communication in Psychiatry and Director of the Center for Health Behavior and Communication Research in the Department of Psychiatry, School of Medicine at the University of Pennsylvania.
- **Dr. Donald S. Kenkel** is a Professor of Policy Analysis and Management in the College of Human Ecology at Cornell University.
- **Dr. Harold Koenig** is a Professor of Psychiatry and Behavioral Sciences, Associate Professor of Medicine, and Director of the Center for Theology, Spirituality and Health at Duke University.

3. Overarching Questions:

- How can the behavioral, social and economic sciences contribute to the design and evaluation of more effective public health policies? What lessons can be learned from the decades-old national campaign to reduce smoking? To what extent are public health policies in general being shaped by what has been learned from the social, behavioral and economic sciences?

- What new and continuing areas of basic research in the social, behavioral and economic sciences could significantly improve our ability to design effective policies? What new technologies and methodologies are enabling advances in the research? Are there promising research opportunities that are not being adequately addressed?
- What is the nature of interactions and collaborations between behavioral and social scientists, biomedical scientists and health (including mental health) practitioners? How might these disparate research and practitioner communities be better integrated to improve human health and well being? Is the Federal government playing an effective role in fostering such collaboration?

4. Federal Spending on Social, Behavioral and Economic Sciences

Basic and applied research in the social, behavioral and economic sciences is funded out of a number of federal agencies, led by the National Institutes of Health (NIH) and the National Science Foundation (NSF). According to research funding statistics compiled by NSF¹, a total of \$1.215 billion was obligated to basic and applied research in all social sciences for fiscal year 2006 (FY06), including economics. Psychology was counted separately, and was funded at a total of \$1.91 billion in FY06, of which \$1.76 billion was funded by Health and Human Services (primarily NIH). Federal support for academic research in particular was \$711 million for social sciences and \$629 million for psychology. There is also a significant amount of foundation support for public health related research.

The main support for basic research in the (non-medical) social and behavioral sciences comes from the Social, Behavioral and Economics Directorate (SBE) at NSF. Overall, NSF accounts for approximately 60 percent of federal support for basic research in anthropology, social psychology and the social sciences at U.S. colleges and universities. In some fields, including archaeology, political science, linguistics, and non-medical aspects of anthropology, psychology, and sociology, NSF is the predominant or exclusive source of federal basic research support. The SBE budget for FY08 is approximately \$220 million, making it the second smallest research directorate at NSF. Fifteen percent of SBE's budget is used not for basic research but to fund the collection and analysis of data on science and engineering research, education and workforce trends (including the data presented here), resulting in the biannual "S&E Indicators."

NIH funds both very basic research, such as that of Dr. Barrett, and research-based interventions such as those designed by Dr. Jemmott. NIH also supports most health economics research, such as that carried out by Dr. Kenkel. NIH's Office of Behavioral and Social Sciences Research (OBSSR), created by Congress in 1993, serves as a coordinating and policy development office for research across NIH's many institutes, rather than funding research directly. OBSSR also serves as NIH's focal point for

¹ Data are based on self-reporting by agencies. In many cases, especially where there is interdisciplinary work, it is hard to tally exact dollars spent on one field or another, so these values are at best an estimate.

coordination of social and behavioral research agendas with other agencies, including NSF. Staff at both NSF and NIH report having a close and productive working relationship. Occasionally the agencies issue joint solicitations, such as a current solicitation in computational neuroscience.

5. Public Health Applications of Social and Behavioral Sciences

NSF does not explicitly fund health research, but it does fund basic research on human behavior as it relates to biological and social phenomena. For example, NSF funds medical anthropologists who study the distribution of genes in a particular region as it relates to the prevalence of a certain disease, and cognitive neuroscientists who study aspects of brain function relevant to autism. NIH funds social and behavioral research with direct public health applications, such as reducing tobacco use, improving mental health, preventing obesity and slowing the HIV/AIDS epidemic.

One of the biggest public health stories of the 20th century is the reduction in tobacco use and smoking-related diseases. Behavioral and social science research helped shape policies to stop kids from taking up smoking, and interventions to help those already addicted to quit. According to the Centers for Disease Control and Prevention, the portion of Americans who smoke dropped from 42.4 percent in 1965 to 20.8 percent in 2007. However, cigarette smoking remains the leading preventable cause of death in the United States, accounting for approximately 1 of every 5 deaths (438,000 people) each year.² The economic costs associated with smoking-related illnesses are estimated to be \$165 billion in health care and disability.

As biomedical and clinical researchers continue to develop understanding of disease mechanisms and develop effective pharmaceutical therapies, social and behavioral scientists continue to elucidate the role of social and behavioral factors in health and illness. The research community, however, has moved beyond genes *or* environment arguments about physical and mental health to studying how genes and environment interact in complex ways to produce behavioral and health outcomes. As such, there is an increasing need for these disparate research and practitioner communities to break down disciplinary and cultural barriers to advance public health and well being.

6. Questions for Witnesses

Two of the witnesses in this hearing carry out the basic behavioral and economics research. One of the witnesses uses theories based on research to design interventions to stem the spread of HIV/AIDS among urban youth. A fourth witness studies the relationship between spirituality and health. All of the witnesses were asked to testify about the nature of their own research and its significance to public health policy. They were also asked about the increasing role of collaborations between behavioral scientists, biomedical scientists and public health practitioners to advance public health, and the role of the Federal government in fostering such collaborations.

² http://www.cdc.gov/tobacco/data_statistics/fact_sheets/adult_data/adult_cig_smoking.htm