

**An Analysis of the NIH Basic Behavioral and Social Sciences Research Report
Submitted to the
House and Senate Committees on Appropriations
May, 2006**

Prepared by Members of the Working Group
Established by the Advisory Committee to the NIH Director
To Advise the NIH Director on issues of
Basic Behavioral Research

In the winter of 2004, a working group of the Advisory Committee to the Director was established by NIH to examine basic behavioral¹ and social sciences research (BSSR) across the NIH. The working group consisted of 14 members representing a wide range of the disciplines in scientific areas in the behavioral and social sciences (Attachment A).

The working group concluded that basic BSSR was critical to the public health mission of the NIH and recommended in its report that a "secure and stable home should be established at NIH that can serve to foster basic behavioral and social sciences research." Four members of the working group (Dr. Susan Fiske, Dr. Robert Levenson, Dr. Bruce McEwen, and working group chair Dr. Linda Waite) presented the report to the Advisory Committee to the Director on December 2, 2004 and afterward learned that the report was accepted by the Committee.

Subsequently, Congress included language in the Conference Agreement on FY 2006 Labor, Health and Human Services, and Education (Conference Report 109-337, p. 78) to request a formal response from NIH with regard to establishing a structural home for basic behavioral research at NIH.

The NIH response to this Congressional request was submitted to Congress in May, 2006. We, the undersigned members of the original working group, have reviewed this response carefully. While fully recognizing that the role of our working group was advisory to the NIH Director, our collective expertise in this area combined with the extensive work we did studying this issue, compels us to comment on the NIH response to Congress and, in particular, on the extent to which it is not consistent with the recommendations contained in our report.

The essence of the NIH response to Congress is that basic BSSR is well-supported under the current NIH structure and that there is little else that needs to be done. This response runs counter to the analysis and recommendations that the working group made in its 2004 report. Moreover, changes at NIH in the ensuing period have dramatically

¹ Broadly defined, **behavioral research** explores and explains the physiological, psychological, and environmental mechanisms involved in functions such as memory, learning, emotion, language, perception, personality, motivation, social attachments, self, and attitudes. Within this, **basic behavioral research** aims to understand the fundamental nature of these processes in their own right (whereas **applied behavioral research** connects this knowledge to real-world concerns such as disease, health, and life stages).

worsened the state of basic BSSR at NIH and have clearly underscored both the validity of the working group's recommendations and the problems with the NIH response.

1. The NIH response overestimates the level of NIH support for basic BSSR.

In its response to Congress, NIH asserts that it provided a total of \$2.68 billion in support for behavioral and social science research for FY2003, with \$930 million going toward basic work (i.e., basic BSSR). The accuracy of any calculation of the amount of NIH support for research in any particular area depends on the definitions used to identify research in that area. As part of its activities, the working group examined a large set of abstracts identified by NIH staff as being representative of the basic BSSR work currently supported by their Institutes and Centers. The working group, all highly experienced behavioral and social science researchers, concluded that, outside of a few institutes (NIA, NIAAA, NICHD, NIMH, NHLB), much of the research we examined was not "behavioral" by our consensual definition and that much of the research said to be "basic" was actually "applied" (i.e., directly connected to specific diseases and life-stages). If this kind of research is indicative of the research included in the NIH estimates of support for total behavioral and social science research and for basic BSSR, then both figures are undoubtedly gross overestimates. Similarly, the assertion in the NIH response to Congress that support for basic BSSR research in FY2004 and FY2005 has grown to be over \$1.0 billion is also called into question.

2. Changes in funding patterns at NIH further threaten basic behavioral research.

The NIH response underestimates the impact of recent changes at NIH that makes the funding situation for basic BSSR even more dire. These changes were already underway when the working group met and were clearly delineated in its report. Most significant have been the well-documented changes in funding policy at NIMH. NIMH has historically been the largest supporter of basic BSSR at NIH. NIMH has been very vocal in announcing its plan to reduce its support for basic BSSR and to redirect its research and training grant portfolios toward "mission-critical" research. In affirming its commitment to mental illness research, NIMH is sharply reducing the major source of support for basic BSSR at NIH and creating the clear need for another Institute or Center to take responsibility for support of this basic science that is so critical to the entire mission of NIH and to the public health of the Nation. The working group, already seeing the beginning of this trend (which has accelerated in the ensuing years), recommended that support for basic BSSR be moved to an Institute or Center that was not linked to a particular disease (e.g., NIMH) or life-stage (e.g., NICHD, NIA). NIGMS is clearly the kind of IC that could provide a stable and supportive home for basic BSSR.

In the period since the working group report, the growth in the research budget at NIH has flattened, pay lines for basic BSSR grants have plummeted, and NIMH has continued to promote its commitment to areas other than basic social and behavioral science research. The field now faces the very real and devastating prospect of a large number of our top basic BSSR scientists being forced to shut down their laboratories. The costs of this to broad areas of science and to the Nation's public health would be enormous.

3. The Office of Behavioral and Social Science Research (OBSSR) is not a funding entity.

The working group applauded the work of OBSSR at NIH. It urged that OBSSR's role in shaping and supporting basic BSSR at NIH be strengthened by helping a non-disease or life-stage IC such as NIGMS prepare and train research administrators in handling basic BSSR grants and by helping basic BSSR scientists make the transition to a new funding entity. These efforts would be highly important as part of any comprehensive solution to the loss of funding support for basic BSSR at NIH. However, OBSSR cannot be the entire solution because it is not a funding entity. A comprehensive solution will also require the recommended support for a funding program at an IC such as NIGMS.

4. Basic BSSR is critical to the Nation's health and welfare; it needs a stable, secure home at NIH.

It is important to step back and ask why continuing support for basic BSSR is so critical. We believe that all parties in this debate (Congress, NIH, the scientific community) agree that basic BSSR is critical to the Nation's health and welfare and to scientific progress in all areas linked to human functioning. Basic BSSR provides the methodological infrastructure that enables us to measure, predict, and change behavior and provides the knowledge base for understanding the sources of, influences on, and outcomes of behavior. Basic BSSR is directly and highly relevant to the public's health and welfare in myriad ways including:

- Medical disorders with strong behavioral comorbidities (e.g., depression and heart disease) and behavioral symptomatology (e.g., changes in cognition and emotion that accompany dementia).
- Mental illnesses in which behavioral symptoms create huge familial, social and economic burdens (e.g., inability to work, parent, or make good decisions).
- Treatments to restore mental health, many of which build directly on research on ways to modify behavior (e.g., cognitive-behavioral treatments for depression and anxiety) and all of which (pharmacological and psychological) rely on measurement of basic behavioral processes to evaluate their efficacy (e.g., alleviation of symptoms, improvement in functioning and quality-of-life).
- Treatment compliance (e.g., adhering to medication regimens) and health promotion/ disease prevention (e.g., avoiding risky behaviors and situations).
- Understanding the functions of genes, neural circuits, and neurotransmitters (e.g., conceptual and methodological breakthroughs in genetics, neuroscience, and neurochemistry will require similar sophistication in terms of the behaviors that are linked to specific genes, circuits, and molecules).
- Behavioral problems with high social costs (e.g., delinquency, poor school performance, criminality, terrorism, addiction, homelessness).

As the working group report concluded, without a stable, supportive home for basic BSSR at NIH, all of these mission-critical and society-critical efforts will suffer. Basic BSSR needs a home at NIH where it is valued and will be secure for the long term, and where basic BSSR scientists can be nurtured throughout their careers. With the changing research priorities at NIMH, the increasingly narrow focuses at all of the disease-centered

institutes, and the flattened overall research budget at NIH, the importance of establishing this kind of home for basic BSSR at NIH is even more critical today than it was in 2004 when the working group made its recommendations.

Signed,

Laura L. Carstensen, Ph.D.
Professor, Department of Psychology
Director, Life-span Development Laboratory
Stanford University

Susan T. Fiske, Ph.D.
Professor, Department of Psychology
Princeton University

William T. Greenough, Ph.D.
Professor of Psychology, Psychiatry, and Cell and Structural Biology
Beckman Institute and Department of Psychology
University of Illinois at Urbana-Champaign

Frances Degen Horowitz, Ph.D.
President and Professor, President's Office and Doctoral Program in Psychology
City University of New York

James S. Jackson, Ph.D.
Daniel Katz Distinguished University Professor of Psychology
Institute for Social Research
University of Michigan

Robert W. Levenson, Ph.D.
Professor, Department of Psychology
Director, Institute of Personality and Social Research
University of California, Berkeley

Bruce S. McEwen, Ph.D.
Professor, Laboratory of Neuroendocrinology
The Rockefeller University

James P. Smith., Ph.D.
Senior Economist
RAND Corporation

David Takeuchi, Ph.D.
Professor, School of Social Work and Department of Sociology
University of Washington

Basic Behavioral Science Working Group Analysis

Linda J. Waite, Ph.D.

Professor, Department of Sociology and National Opinion Research Center
University of Chicago

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Attachment A

Working Group of the NIH Advisory Committee to the Director on Research Opportunities in the Basic Behavioral and Social Sciences

Chair

Linda J. Waite, Ph.D.

Professor, Department of Sociology and National Opinion Research Center
University of Chicago

Richard Axel, M.D.

University Professor, Investigator, Department of Biochemistry and Molecular
Biophysics
Howard Hughes Medical Institute, Columbia University

Maja Bucan, Ph.D.

Professor, Department of Genetics and Center for Neurobiology and Behavior
Department of Psychiatry
University of Pennsylvania

Laura L. Carstensen, Ph.D.

Professor, Department of Psychology
Stanford University

Richard J. Davidson, Ph.D.

Vilas Professor of Psychology and Psychiatry, Department of Psychology
University of Wisconsin

Susan T. Fiske, Ph.D.

Professor, Department of Psychology
Princeton University

William T. Greenough, Ph.D.

Professor of Psychology, Psychiatry, and Cell and Structural Biology
Beckman Institute and Department of Psychology
University of Illinois at Urbana-Champaign

Frances Degen Horowitz, Ph.D.

President and Professor, President's Office and Doctoral Program in Psychology
City University of New York

James Jackson, Ph.D.

Daniel Katz Distinguished University Professor of Psychology and
Institute for Social Research
University of Michigan

Basic Behavioral Science Working Group Analysis

Robert W. Levenson, Ph.D.

Professor, Department of Psychology and Director, Institute of Personality
and Social Research
University of California, Berkeley

Bruce S. McEwen, Ph.D.

Professor, Laboratory of Neuroendocrinology
The Rockefeller University

Jane Menken, Ph.D.

Distinguished Professor of Sociology and Director, Institute of Behavioral Sciences
Department of Sociology
University of Colorado at Boulder

James P. Smith., Ph.D.

Senior Economist
RAND Corporation

David Takeuchi, Ph.D.

Professor, School of Social Work and Department of Sociology
University of Washington