United States Senate

COMMITTEE ON
ENERGY AND NATURAL RESOURCES

WASHINGTON, DC 20510-6150

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October 13, 1999

The Honorable Harold E. Varmus
Director
National Institutes of Health
9000 Rockville Pike
Bethesda, Maryland 20892

Dear Dr. Varmus:

On October 7, 1999, the Senate adopted the enclosed provision expressing the Sense of the Senate, as an amendment to the Department of Labor, Health and Human Services, and Education and Related Agencies Appropriations Act, 2000. This amendment states that the National Institutes of Health (NIH) should enter into appropriate arrangements with the National Academy of Sciences to conduct a comprehensive study and investigation into the scientific validity of polygraphy as a screening tool for federal and federal contractor personnel, with particular reference to the validity of polygraph tests being proposed for use by the Department of Energy (DOE) in proposed rules published at 64 Fed. Reg. 45062 (August 18, 1999).

I hope that you will agree to take the steps necessary to initiate such a study by the National Academy, even though the language of the amendment is that of a recommendation and not a command. The last major scientific and technical review of the research literature on polygraphy was conducted by the former Congressional Office of Technology Assessment (OTA) in 1983. That review found that "the available research evidence does not establish the scientific validity of the polygraph test for personnel security screening."[1] The OTA concluded that "while there is some evidence for the validity of polygraph testing as an adjunct to criminal investigations, there is very little research or scientific evidence to establish polygraph test validity in screening situations, whether they be preemployment, preclearance, periodic or aperiodic, random, or 'dragnet.'"[2] At the same time, the use of polygraphy for screening by the government is slated to increase dramatically under new rules proposed by the DOE. According to public statements by Departmental officials, up to 5,000 scientists and engineers in DOE laboratories would be subjected to these requirements.

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[1] Office of Technology Assessment, United States Congress, SCIENTIFIC VALIDITY OF POLYGRAPH TESTING: A RESEARCH REVIEW AND EVALUATION—A TECHNICAL MEMORANDUM. OTA-TM-H-15. 4 (Washington, D.C., November 1983).

[2] *Id.* at 8.

It is possible that this rule portends a more general trend towards the use of polygraphy in other scientific institutions where national defense research is undertaken.

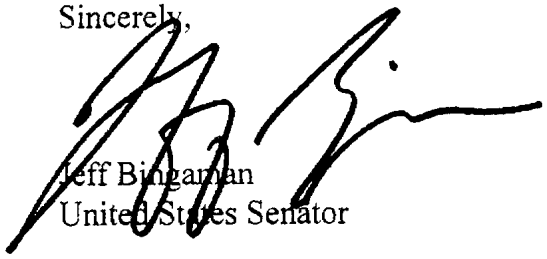
Polygraphy is based on theories and predictions regarding psychophysiological phenomena in humans. These matters are within the technical expertise of the NIH. Further, a number of concerns regarding the potential sources of false positives in polygraphs are explicitly related to matters that would also be within the expertise of NIH. These include the effects of prescription and nonprescription drugs on the validity of polygraph tests, as well as differential responses to polygraph tests according to biological and physiological factors that may vary according to age, gender, or ethnic backgrounds, or other factors relating to natural variability in human populations.

I understand that NIH would not seek to inject itself, unasked, into a debate over the scientific validity of actions contemplated by another Federal agency. I believe, though, that the NIH possesses the unique combination of technical expertise and policy objectivity that is needed to frame a charge to the National Academy of Sciences for a study that would update the 1983 OTA report, with particular reference to the latest proposals for using polygraphs as a screening tool. My colleagues in the Senate have agreed with this judgment in adopting the amendment. Thus, I am asking the NIH to initiate and support such a study.

Because of the recent reinstatement of Senate Rule XVI, governing authorization language on appropriations bills, it was not possible for me to formulate my amendment in a form that would have provided increased funding for NIH to specifically support an Academy study. I hope that you will work with the National Academy to provide adequate support for a study out of other funds that will be available in fiscal year 2000. The importance of this matter to the future technical vitality of the DOE National Laboratories, a key set of Federal research institutions on which NIH has some plans to rely in the future, would justify the relatively modest NIH investment in such a study.

Thank you for your attention to and consideration of this request. I look forward to your favorable reply.

Sincerely,



Jeff Bingaman
United States Senator

Enclosure

cc: Dr. Bruce Alberts
President, National Academy of Sciences

Department of Labor, Health and Human Services, and Education and Related Agencies Appropriations Act, 2000

SEC.___. CONFOUNDING BIOLOGICAL AND PHYSIOLOGICAL INFLUENCES ON POLYGRAPHY.

(a) FINDINGS.–The Senate finds that–

(1) The use of polygraph tests as a screening tool for federal employees and contractor personnel is increasing.

(2) A 1983 study by the Office of Technology Assessment found little scientific evidence to support the validity of polygraph tests in such screening applications.

(3) The 1983 study further found that little or no scientific study had been undertaken on the effects of prescription and non-prescription drugs on the validity of polygraph tests, as well as differential responses to polygraph tests according to biological and physiological factors that may vary according to age, gender, or ethnic backgrounds, or other factors relating to natural variability in human populations.

(4) A scientific evaluation of these important influences on the potential validity of polygraph tests should be studied by a neutral agency with biomedical and physiological expertise in order to evaluate the further expansion of the use of polygraph tests on federal employees and contractor personnel.

(b) SENSE OF THE SENATE.–It is the Sense of the Senate that the Director of the National Institutes of Health should enter into appropriate arrangements with the National Academy of Sciences to conduct a comprehensive study and investigation into the scientific validity of polygraphy as a screening toot for federal and federal contractor personnel, with particular reference to the validity of polygraph tests being proposed for use in proposed rules published at 64 Fed. Reg. 45062 (August 18, 1999).