

**NATIONAL ACADEMY OF SCIENCES/NATIONAL RESEARCH COUNCIL  
DIVISION OF BEHAVIORAL AND SOCIAL SCIENCES AND EDUCATION**

**Committee to Review the Scientific Evidence on the Polygraph  
April 27, 2001  
Holiday Inn Georgetown, 2101 Wisconsin Avenue, Washington, DC  
Fortune Room  
Telephone: 202/334-3026; 202/338-4600**

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**Agenda**

- |          |                                                                                                                                                                                               |                      |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 8:30 am  | Introduction of members not present at January meeting (Cacioppo, Ekman, Keeler, Shiffrin)                                                                                                    |                      |
| 9:00 am  | Presentations from federal agencies that use polygraph for screening; discussion<br>Judge William H. Webster, Webster group<br>Anne Witkowsky, Center for Strategic and International Studies |                      |
| 10:15 am | Break                                                                                                                                                                                         |                      |
| 10:30 am | Other input<br>Gary Berntson, Ohio State University<br>George Maschke, antipolygraph.org                                                                                                      |                      |
| 12:00 pm | Lunch (Committee & Invited Guests)                                                                                                                                                            |                      |
| 1:00 pm  | Discussion of committee site visits to Department of Defense Polygraph Institute and DOE Test Center                                                                                          |                      |
| 1:30 pm  | Discussion of polygraph screening studies (TAB 4-10)<br>--Issues of realism and internal and external validity<br>--Issues of statistical integrity                                           | Cacioppo<br>Grambsch |
| 2:30 pm  | Discussion of relevance of non-screening studies for screening                                                                                                                                | Laskey               |

3:00 pm	Break	
3:15 pm	Discussion of other issues	
	--Data needed to evaluate evidence on countermeasures	Blascovich
	--Alternate measures of deception	Raichle, Ekman
	--Case examples of how science and society come to accept or reject forensic technologies	Fienberg, Faigman
5:00 pm	Adjourn	

### **PURPOSE OF THE MEETING**

This meeting is being held to gather information to help the committee conduct its study. This committee will examine the information and material obtained during this, and other public meetings, in an effort to inform its work. Although opinions may be stated and lively discussion may ensue, no conclusions are being drawn at this time; no recommendations will be made. In fact, the committee will deliberate thoroughly before writing its draft report. Moreover, once the draft report is written, it must go through a rigorous review by experts who are anonymous to the committee, and the committee then must respond to this review with appropriate revisions that adequately satisfy the Academy's Report Review committee and the chair of the NRC before it is considered an NRC report. Therefore, observers who draw conclusions about the committee's work based on today's discussions will be doing so prematurely.

Furthermore, individual committee members often engage in discussion and questioning for the specific purpose of probing an issue and sharpening an argument. The comments of any given committee member may not necessarily reflect the position he or she may actually hold on the subject under discussion, to say nothing of that person's future position as it may evolve in the course of the project. Any inferences about an individual's position regarding findings or recommendations in the final report are therefore also premature.

**Committee to Review the Scientific Evidence on the Polygraph  
April 27-28, 2001**

**ATTENDEES**

**Committee Members**

**Stephen Fienberg** (Chair), Carnegie Mellon University  
**James Blascovich**, University of California, Santa Barbara  
**John Cacioppo**, University of Chicago  
**Richard Davidson**, University of Wisconsin  
**Paul Ekman**, University of California, Berkeley  
**David Faigman**, UC-Hastings College of Law, San Francisco  
**Patricia Grambsch**, University of Minnesota  
**Peter Imrey**, University of Illinois, Champaign  
**Emmett Keeler**, RAND Health, Santa Monica  
**Kathryn Laskey**, George Mason University  
**Marcus Raichle**, Washington University School of Medicine, St. Louis  
**Richard Shiffrin**, Indiana University  
**John Swets**, BBN Technologies, Tequesta, FL

***Unable to Attend***

**Kevin Murphy**, Pennsylvania State University

**Invited Guests**

**Gary Berntson**, Ohio State University, Columbus  
**George W. Maschke**, antipolygraph.org  
**Judge William H. Webster**, Webster Commission, Washington, DC  
**Anne Witkowsky**, Center for Strategic and International Studies, Washington, DC

**National Research Council Staff**

**Christine Hartel**, Director, Board on Behavioral, Cognitive, and Sensory Sciences  
**Andrew White**, Director, Committee on National Statistics  
**Barbara Torrey**, Executive Director, Division of Behavioral and Social Sciences and Education  
**Susan McCutchen**, Research Associate  
**Deborah Johnson**, Senior Project Assistant

**Project Scope**  
**Study to Review the Scientific Evidence on the Polygraph**  
**Study Director: Paul Stern**

The Board on Behavioral, Cognitive, and Sensory Sciences and the Committee on National Statistics, under the National Research Council's Division of Behavioral and Social Sciences and Education, have convened a committee to conduct a scientific review of the research on polygraph examinations that pertains to their validity and reliability, in particular for personnel security screening. The review will include what is known about the effect of medications, sleep deprivation, and illnesses on the physiological responses measured. The committee's work began on January 1, 2001. The report will present the committee's assessments of and recommendations for polygraph examinations for personnel security purposes and the committee's suggestions for further research. The sponsor for this committee is the U.S. Department of Energy.

## COMMITTEE TO REVIEW THE SCIENTIFIC EVIDENCE ON THE POLYGRAPH

**Stephen Fienberg** (Chair), Department of Statistics, Carnegie Mellon University

**James Blascovich**, Department of Psychology, University of California, Santa Barbara

**John Cacioppo**, Department of Psychology, University of Chicago

**Richard Davidson**, Department of Psychology, University of Wisconsin

**Paul Ekman**, Human Interaction Lab, University of California, Berkeley

**David Faigman**, UC-Hastings College of Law, San Francisco

**Patricia Grambsch**, Biostatistics Department, University of Minnesota

**Peter Imrey**, Department of Statistics, University of Illinois, Champaign

**Emmett Keeler**, RAND Health, Santa Monica

**Kathryn Laskey**, Systems Engineering and Operations Research Department, George Mason University

**Kevin Murphy**, Department of Psychology, Pennsylvania State University

**Marcus Raichle**, Washington University School of Medicine, St. Louis

**Richard Shiffrin**, Department of Psychology, Indiana University

**John Swets**, BBN Technologies, Tequesta, FL

**Christine Hartel**, Director, Board on Behavioral, Cognitive, and Sensory Sciences (Acting Study Director)

**Paul Stern**, Study Director

**Susan McCutchen**, Research Associate

**Deborah Johnson**, Senior Project Assistant