

**TO TELL THE TRUTH: REPORTING WHAT WE KNOW ABOUT LIE
DETECTION**

FIENBERG, Stephen E.
Carnegie Mellon University
USA

Tens of thousands of individuals undergo polygraph security screening examinations every year. How good is the polygraph in detecting deception in such settings? About two and one-half years ago, the U.S. National Research Council's Committee to Review the Scientific Evidence on the Polygraph released its report, "The Polygraph and Lie Detection," addressing this issue. Assessing the statistical evidence regarding the accuracy of the polygraph was just the first part of the committee's job. We also needed to communicate the results of its assessments in a way that could educate the public and have maximal impact on public policy. In this talk we provide an overview of the committee's work, including the statistical evidence on the accuracy of the polygraph, and we discuss choices we made for reporting the results and their public impact.

Note: A full paper of this work will appear later in the year in

STATISTICAL SCIENCE,

see [HTTP://WWW.JSTOR.ORG/JOURNALS/08834237.HTML](http://WWW.JSTOR.ORG/JOURNALS/08834237.HTML)

Title: In Search of the Magic Lasso: The Truth About the Polygraph

Authors:

Stephen E. Fienberg

Department of Statistics

Center for Automated Learning and Discovery

Cylab

Carnegie Mellon University, Pittsburgh, PA 15213, U.S.A.

and

Paul C. Stern

Division of Social and Behavioral Sciences and Education

National Research Council

Washington, DC 10010 U.S.A.

February 8, 2005