



National Science Foundation

4201 Wilson Boulevard
Arlington, Virginia 22230

Research on Data Confidentiality

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Directorate for Social, Behavioral, and Economic Sciences (SBE)
Directorate for Computer and Information Science and Engineering (CISE)
Directorate for Education and Human Resources (EHR)

Dear Colleague:

Programs in SBE, CISE, and EHR are soliciting research proposals to explore ways of improving the confidentiality of data about individuals and organizations while also permitting legitimate social and research uses of that data. Confidentiality refers to the obligations of individuals and institutions not to transmit identifiable information – regarding an individual or an organization - to an unauthorized party. Rules of confidentiality protect and preserve individual privacy, and proprietary or restricted organizational information. Data confidentiality focuses on ways of effectively maintaining the agreement made to a data provider by a data gatherer regarding access to information.*

New capacities to collect and integrate data about individuals and organizations offer expanded potential for scientists and policy-makers to understand factors contributing to key national priorities like job, income and wealth creation, as well as career path, health, medical and retirement decisions. The potential benefits of these new data capabilities come with certain costs. New data collection methods and substantial archives of static information, for example income, consumption, health and genetic data, pose troubling confidentiality questions. The emerging cyberinfrastructure connecting observing and sensing systems, intelligent and remotely operable instrumentation, collaboratories, federated data archives, and digital libraries will only compound data confidentiality problems.

This Dear Colleague Letter is seen as an initial step toward meeting the goal of innovatively developing confidentiality protections while maximizing appropriate use of the data. We are particularly interested in approaches which combine techniques that have been developed somewhat separately in a number of different disciplines, including computer and information science and engineering and the social, behavioral and economic sciences. The purpose of this letter is to call to the attention of the relevant research communities the disciplinary and interdisciplinary research opportunities that now exist for research on data confidentiality.

Proposals with the following features are strongly encouraged:

- analyses and solutions of data confidentiality issues in real-world contexts;
- focus on data collection and data access issues and solutions.

Opportunities for funding include the following:

Cyber Trust Program Solicitation <http://www.nsf.gov/pubs/2006/nsf06517/nsf06517.htm>
Contact : Karl Levitt (klevitt@nsf.gov)

Information and Intelligent Systems Solicitation
<http://www.nsf.gov/div/index.jsp?div=IIS>
Contact: Le Gruenwald (lgruenwa@nsf.gov)

Human and Social Dynamics
http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06509
Contact: Mark Weiss (mweiss@nsf.gov)

Methodology, Measurement, and Statistics
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5421&org=SES&from=home
Contact: Cheryl Eavey (ceavey@nsf.gov)

Research, Evaluation, and Communication
<http://www.nsf.gov/div/index.jsp?div=REC>
Contact: Larry Suter (lsuter@nsf.gov)

Principal investigators should consult the specific solicitations and program announcements to make sure they are meeting relevant proposal requirements.

If you have additional questions about relevant programs in the Social, Behavioral and Economic Sciences Directorate (SBE), please contact Cheryl Eavey (ceavey@nsf.gov). If you have additional questions about relevant solicitations in the Computer and Information Science and Engineering Directorate (CISE), please contact Le Gruenwald (lgruenwald@nsf.gov). If you have additional questions about relevant programs in the Education and Human Resources Directorate (EHR), please contact Larry Suter (lsuter@nsf.gov). If you have questions about related activities in data confidentiality at NIH contact Georgeanne Patmios (patmiosg@nia.nih.gov).

** Private Lives and Public Policies: Confidentiality and Accessibility of Government Statistics* (Committee on National Statistics, NRC and the Social Science Research Council, National Academy Press, 1993), p. 22-3 and *Expanding Access to Research Data: Reconciling Risks and Opportunities* (Committee on National Statistics, NRC and the Social Science Research Council, National Academy Press, 2005), p. 8.