

The U.S. Department of Justice, Office of Justice Programs, National Institute of Justice is seeking applications for funding for social science research in forensic science. This program furthers the Department's mission by sponsoring research to provide objective, independent, evidence-based knowledge and tools to meet the challenges of crime and justice, particularly at the State and local levels.

# Solicitation: Social Science Research in Forensic Science

## Eligibility

(See "Eligibility," page 3)

## Deadline

All applications are due February 20, 2008, 11:59 p.m. eastern time.

## **Contact Information**

For assistance with the requirements of this solicitation, contact Katharine Browning, Senior Social Science Analyst, at 202–616–4786 or <u>katharine.browning@usdoj.gov</u>.

This application must be submitted through Grants.gov. For technical assistance with submitting the application, call the Grants.gov Customer Support Hotline at 1–800–518–4726.

Grants.gov Funding Opportunity No. 2008–NIJ–1735

SL# 000821

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## Social Science Research in Forensic Science CFDA No. 16.560

## Overview

The National Institute of Justice (NIJ) is the research, development, and evaluation agency of the U.S. Department of Justice and a component of the Office of Justice Programs (OJP). NIJ provides objective, independent, evidence-based knowledge and tools to enhance the administration of justice and public safety. NIJ solicits applications to inform its search for the knowledge and tools to guide policy and practice.

The field of forensic science has experienced numerous advances over the last decade. Improvements in technology have increased capabilities to utilize forensic evidence, both in terms of what can be analyzed and how quickly it can be processed. NIJ is interested in stimulating research to determine how effectively forensic evidence is being used to identify and process criminal offenders and the impact of these advances on the criminal justice system.

## **Deadline: Registration**

Registering with Grants.gov is a one-time process; however, if you are a first-time registrant, it could take up to several weeks to have your registration validated and confirmed and to receive your user password. Start the registration process early to prevent delays that may cause you to miss the application deadline. You must complete these three steps before you are able to register: 1) Register with Central Contractor Registry (CCR), 2) Register yourself as an Authorized Organization Representative (AOR), and 3) Be authorized as an AOR by your organization. For more information, visit <u>http://www.grants.gov</u>. Note: Your CCR Registration must be renewed once a year. Failure to renew your CCR registration may prohibit submission of a grant application through Grants.gov.

## **Deadline: Application**

The due date for applying for funding under this announcement is **February 20, 2008**, **11:59 p.m. eastern time.** 

## Eligibility

In general, NIJ is authorized to make grants to, or enter into contracts or cooperative agreements with, States (including territories), local governments (including federally recognized Indian tribal governments that perform law enforcement functions), nonprofit and profit organizations (including tribal nonprofit and profit organizations), institutions of higher education (including tribal institutions of higher education), and certain qualified individuals. Foreign governments, foreign organizations, and foreign institutions of higher education are not eligible to apply.

**Faith-Based and Other Community Organizations:** Consistent with President George W. Bush's Executive Order 13279, dated December 12, 2002, and 28 C.F.R. Part 38, it is DOJ policy that faith-based and other community organizations that statutorily qualify as eligible applicants under DOJ programs are invited and encouraged to apply for assistance awards to fund eligible grant activities. Faith-based and other community organizations will be considered for awards on the same basis as other eligible applicants and, if they receive assistance awards, will be treated on an equal basis with all other grantees in the administration of such awards. No eligible applicant or grantee will be discriminated for or against on the basis of its religious character or affiliation, religious name, or the religious composition of its board of directors or persons working in the organization.

Faith-based organizations receiving DOJ assistance awards retain their independence and do not lose or have to modify their religious identity (e.g., removing religious symbols) to receive assistance awards. DOJ grant funds, however, may not be used to fund any inherently religious activity, such as prayer or worship. Inherently religious activity is permissible, although it cannot occur during an activity funded with DOJ grant funds; rather, such religious activity must be separate in time or place from the DOJfunded program. Further, participation in such activity by individuals receiving services must be voluntary. Programs funded by DOJ are not permitted to discriminate in the provision of services on the basis of a beneficiary's religion.

If your organization is a faith-based organization that makes hiring decisions on the basis of religious belief, it may be entitled, under the Religious Freedom Restoration Act, 42 U.S.C. § 2000bb, to receive Federal funds and yet maintain that hiring practice, even if the law creating the funding program contains a general ban on religious discrimination in employment. For the circumstances under which this may occur, and the certifications that may be required, please see "Other Requirements for OJP Applications" at <a href="http://www.ojp.usdoj.gov/funding/otherrequirements.htm">http://www.ojp.usdoj.gov/funding/otherrequirements.htm</a>.

Applicants are encouraged to review the Civil Rights Compliance section under "Additional Requirements" in this announcement.

American Indian Tribes and Alaska Native Tribes and/or Tribal Organizations: If a grant application is being submitted on behalf of a tribe or tribal organization, a letter or similar document authorizing the inclusion of the tribe or tribal organization named in the application must be included.

# Specific Information—Social Science Research in Forensic Science

The field of forensic science has experienced numerous advances over the last decade. Improvements in technology have increased capabilities to make use of forensic evidence, both in terms of what can be analyzed and how quickly it can be processed. As forensic evidence plays an increasingly important role in solving crimes, NIJ has begun examining social science questions related to how effectively forensic evidence is being used to identify and process criminal offenders and the impact of these advances on the criminal justice system. NIJ is currently funding several projects in this emerging research area including a demonstration project examining the cost-effectiveness of collecting DNA evidence in property crimes; a study of the impact of forensic evidence on criminal justice processes; and a study of the deterrent effects of DNA databases. NIJ has identified several specific areas of interest for this solicitation. Within each of these areas of interest, NIJ has proposed some specific research questions, but applicants are free to propose other research questions that address the area of interest. Research proposed under this solicitation should have direct implications for policy and/or practice for forensic science in the criminal justice system, and these implications should be clearly stated in the application.

#### Research to improve the use of forensic evidence in violent crime investigations:

Although forensic evidence has long played an important role in violent crimes, we know very little about how criminal investigators actually use forensic evidence during the course of an investigation. For example, we do not have systematic research to document the extent to which investigators rely on the results of forensic analyses to help solve the crime versus simply using forensic analyses to confirm what has been determined through other means. Nor do we have a good understanding of whether/how the influence of forensic evidence on an investigation might rise with more rapid forensic analysis turnaround times. NIJ is interested in supporting systematic studies of the role of forensic evidence in violent crime investigations and examining possible mechanisms for improving the use of forensic evidence in these cases. Such research has important implications for prioritizing forensic analyses in the laboratory. The following list contains possible research questions in this area, but applicants are free to propose other research questions in this area:

- 1. What role does DNA evidence play in violent crime (or some subset of violent crime) investigations and prosecutions and how does this differ based on the turnaround time for DNA analysis?
- 2. What is the impact of having specially trained law enforcement units that focus on specific violent crimes versus more generalized methods of investigation in terms of the use of forensics and the level of coordination with the crime laboratory and prosecution?
- 3. What has been the impact of current or new protocols used in rape investigations on the victim and/or case outcomes?

**Research to improve the practice and processing of impression evidence:** Now that DNA has become the new gold standard of forensic evidence (see Michael Saks and Jonathan Loehler, "The Coming Paradigm Shift in Forensic Identification," *Science*, 2005, Vol. 309, Issue 5736, pp. 892–895), impression evidence (including fingerprints, toolmarks, bite marks, and shoe prints) has begun to face some scrutiny both in the scientific press and the courtroom. Although fingerprints are still widely accepted as a method of identification, questions have been raised about errors and the subjective aspects of the analysis. Several high-profile mistakes in this area have prompted laboratories to take a closer look at the procedures employed to minimize errors. Other forms of impression evidence are vulnerable to similar types of problems. NIJ is interested in stimulating more research in this area, particularly as it pertains to:

- 1. The identification and testing of methods to strengthen the verification process in the analysis of impression evidence.
- 2. The documentation and/or improvement of internal validation processes.

3. Studies that examine the extent to which context (other information about the case) may contribute to bias in the analysis, interpretation, and presentation of impression evidence and how such bias (if any) can be minimized.

**Research to improve the use and understanding of forensic evidence in the courtroom**: Use of the term "the CSI effect" has become almost as common as the CSI shows themselves. Criminal justice professionals around the country have noticed that jurors often come to court with high, often unrealistic, expectations of forensic evidence. This, coupled with the increasingly sophisticated techniques being used to examine forensic evidence, is leading to the need for greater education, training, and changes in court procedures to improve the understanding of forensic results by jurors, prosecution and defense lawyers, and judges.

Over the last few years, there have been a number of courtroom innovations designed to improve the understanding of forensic evidence by judges and/or juries. These innovations include such practices as sequencing expert testimony back-to-back and providing basic education on forensic science in the courtroom prior to expert testimony being presented. NIJ is interested in evaluations of these types of courtroom innovations to determine how these changes improve the understanding of forensic evidence by judicial decisionmakers.

**Evaluation research:** Within applications proposing evaluation research, funding priority will be given to experimental research designs that use random selection and assignment of participants to experimental and control conditions. When randomized designs are not feasible, priority will be given to quasi-experimental designs that include contemporary procedures like Propensity Score Matching and Regression Discontinuity Design to address selection bias in evaluating outcomes and impacts.

Evaluations which also include measurements of program fidelity and implementation as part of a thorough process assessment are desirable. Measurements of program fidelity should be included as part of an assessment of program processes and operations to assure that policies, programs, and technologies are implemented as designed. As one aspect of a comprehensive evaluation, assessments of program processes should include objective measurements and qualitative observations of programs as they are actually implemented and services are delivered. These may include assessment of such aspects as adherence to program content and protocol, quantity and duration, quality of delivery, and participant responsiveness.

Proposed evaluation research designs with multiple units of analysis and multiple measurements will also be given priority. Design aspects that contribute to the validity of results are necessary to effectively address issues of generalizability and representativeness of findings.

Finally, applications that include additional cost/benefit analysis will be given priority. Cost/benefit analysis is viewed by NIJ as an effective way to communicate and disseminate findings from evaluation research.

**Please note:** All applicants under this solicitation must comply with Department of Justice regulations on confidentiality and human subjects protection. See the Confidentiality and Human Subjects Protection Compliance section under "Additional Requirements" in this announcement.

#### What will *not* be funded:

1. Provision of training or direct service.

2. Proposals primarily to purchase equipment, materials, or supplies. (Your budget may include these items if they are necessary to conduct applied research, development, demonstration, evaluation, or analysis.)

3. Work that will be funded under another specific solicitation.

**Cost of proposed work:** NIJ anticipates that up to \$2 million may become available for awards made through this solicitation. All awards are subject to the availability of appropriated funds and to any modifications or additional requirements that may be imposed by law. NIJ expects to make up to two to eight awards depending on funds available and number of high-quality applications. If you propose a project that exceeds the amount of money that may be available for awards under this solicitation, we recommend that you divide the project into phases, stages, or tasks so that NIJ can consider making an award for a specific portion of the work. NIJ cannot guarantee that subsequent phases, stages, or tasks will be funded. Such additional funding depends on NIJ's resources and your satisfactory completion of each phase, stage, or task. Note: Deliverables (e.g., a final report) will be required at the end of each phase, stage, or task.

A grant made by NIJ under this solicitation may account for up to 100 percent of the total cost of the project. See "Cofunding," under "What an Application Must Include."

Limitation on use of award funds for employee compensation; waiver: No portion of any award of more than \$250,000 made under this solicitation may be used to pay any portion of the total cash compensation (salary plus bonuses) of any employee of the award recipient whose total cash compensation exceeds 110 percent of the maximum annual salary payable to a member of the Federal Government's Senior Executive Service (SES) at an agency with a Certified SES Performance Appraisal System for that year. (The salary table for SES employees is available at <u>http://www.opm.gov</u>.)

This prohibition may be waived at the discretion of the Assistant Attorney General for the Office of Justice Programs. An applicant that wishes to request a waiver should include a detailed justification in the budget narrative for the application.

### **Performance Measures**

To assist in fulfilling the Department's responsibilities under the Government Performance and Results Act (GPRA), P.L. 103–62, applicants who receive funding under this solicitation must provide data that measures the results of their work. Performance measures for this solicitation are as follows:

Objective	Performance Measures	Data Grantee Provides
Develop and analyze information and data having clear implications for criminal justice policy and practice concerning forensic evidence.	<ol> <li>Relevance to the needs of the field as measured by whether the grantee's substantive scope did not deviate from the funded proposal or any subsequent agency modifications to the scope.</li> <li>Quality of the research as assessed by peer reviewers.</li> </ol>	1. A final report providing a comprehensive overview of the project and a detailed description of the project design, data, and methods; a full presentation of scientific findings; and a thorough discussion of the implications of the project findings for criminal justice practice and policy.
	3. Quality of management as measured by whether significant interim project milestones were achieved, final deadlines were met, and costs remained within approved limits.	2. Quarterly financial reports, semi-annual progress reports, and a final progress report.

## How to Apply

DOJ is participating in the e-Government initiative, one of 25 initiatives included in the President's Management Agenda. Part of this initiative—Grants.gov—is a "one-stop storefront" that provides a unified process for all customers of Federal grants to find funding opportunities and apply for funding.

**Grants.gov Instructions:** Complete instructions can be found at <a href="http://www.grants.gov/applicants/get\_registered.jsp">http://www.grants.gov/applicants/get\_registered.jsp</a>. If you experience difficulties at any point during this process, please call the Grants.gov Customer Support Hotline at 1–800–518–4726.

**Note: Grants.gov does not support the Microsoft Vista operating system.** The PureEdge software used by Grants.gov for forms is not compatible with Vista. Also, Grants.gov cannot yet process Microsoft Word 2007 documents saved in the new default format with the extension ".DOCX." Please ensure the document is saved using "Word 97-2003 Document (\*.doc)" format.

Please also note: OJP's Grants Management System (GMS) does not accept executable file types as application attachments. OJP's Grants Management System (GMS) downloads applications from Grants.gov and is the system in which OJP reviews applications and manages awarded grants. These disallowed file types include, but are not limited to, the following extensions: ".com", ".bat", ".exe", ".vbs", ".cfg", ".dat", ".db", ".dbf", ".dll", ".ini", ".log", ".ora", ".sys", and ".zip".

**CFDA Number:** The Catalog of Federal Domestic Assistance (CFDA) number for this solicitation is 16.560, titled "Social Science Research in Forensic Science," and the Grants.gov funding opportunity number is **2008–NIJ–1735.** 

A DUNS number is required: The Office of Management and Budget requires that all businesses and nonprofit applicants for Federal funds include a DUNS (Data Universal

Numeric System) number in their application for a new award or renewal of an award. Applications without a DUNS number are incomplete. A DUNS number is a unique ninedigit sequence recognized as the universal standard for identifying and keeping track of entities receiving Federal funds. The identifier is used for tracking purposes and to validate address and point-of-contact information. The DUNS number will be used throughout the grant life cycle. Obtaining a DUNS number is a free, simple, one-time activity. Obtain one by calling 1–866–705–5711 or by applying online at <a href="http://www.dnb.com/us">http://www.dnb.com/us</a>. Individuals are exempt from this requirement.

## What an Application Must Include

#### Standard Form 424

#### **Program Narrative**

The Program Narrative includes:

- a. Abstract (not to exceed 400 words).
- b. Table of contents.
- c. Main body, which includes:
  - Purpose, goals, and objectives.
  - Review of relevant literature.
  - Research design and methods.
  - Implications for criminal justice policy and practice.
  - Management plan and organization.
  - Dissemination strategy.
- d. Appendixes (not counted against program narrative page limit) include:
  - Bibliography/References (if applicable).
  - Data Archiving Strategy (see "Other Program Attachments" below).
  - List of key personnel (required).
  - Résumés of key personnel (required).
  - List of previous and current NIJ awards (required).
  - Letters of cooperation/support or administrative agreements from organizations collaborating in the project (if applicable).
  - Chart for timeline, research calendar, or milestones (required).
  - Other materials required by the solicitation.

#### Budget Detail Worksheet

Templates for filling out the Budget Detail Worksheet may be found online at <u>http://www.oip.usdoj.gov/Forms/budget\_fillable.pdf</u>, OJP Standard Forms & Instructions. If you have any questions, please contact the Office of the Chief Financial Officer's Customer Service Center at 1–800–458–0786.

#### **Budget Narrative**

#### Indirect Rate Agreement (if applicable)

Applicants that do not have a federally negotiated indirect cost rate and wish to establish one can submit a proposal to their "cognizant" Federal agency. Generally, the cognizant Federal agency is the agency that provides the preponderance of direct Federal funding. This can be determined by reviewing an organization's schedule of Federal financial assistance. If DOJ is your cognizant Federal agency, obtain information needed to submit an indirect cost rate proposal at <a href="http://www.ojp.usdoj.gov/oc/indirectcosts.htm">http://www.ojp.usdoj.gov/oc/indirectcosts.htm</a>.

#### **Other Program Attachments**

These include several forms, available on OJP's funding page at <u>http://www.ojp.usdoj.gov/forms.htm</u>.

**Data Archiving Strategy:** NIJ requires that each data set resulting from funded research be submitted as a grant product or deliverable for archiving with the National Archive of Criminal Justice Data. (Data sets are to be submitted 90 days before the end of the project period.) Applications for NIJ research grants must include a brief (one- or two-page) data archiving strategy. For purposes of research replication and extension, the inclusion of only the final data set often prevents other researchers from replicating or extending the study because there is no original data, intermediate data, or documentation detailing how the data changed throughout the project. This data archiving strategy therefore must briefly describe the—

- Anticipated manipulations of original, intermediate, and final data sets (as applicable).
- Methods of documentation of such manipulations.
- Preparation of original, intermediate, and final data sets for archive submission.

The data archiving strategy should be submitted as an appendix to the application and will NOT count toward the 30-page limit. Please label this appendix "Data Archiving Strategy."

**Page limit:** The program narrative section of your proposal must not exceed 30 doublespaced pages in 12-point font with 1-inch margins. Abstract, table of contents, charts, figures, appendixes, and government forms do not count toward the 30-page limit for the narrative section.

**Cofunding:** A grant made by NIJ under this solicitation may account for up to 100 percent of the total cost of the project. You must indicate whether you believe it is feasible for you to contribute cash, facilities, or services as non-Federal support for the project. Your proposal should identify generally any such contributions that you expect to make and your proposed budget should indicate in detail which items, if any, will be supported with non-Federal contributions.

## **Selection Criteria**

Successful applicants must demonstrate the following:

#### Understanding of the problem and its importance.

- 1. Clarity of problem statement.
- 2. Awareness of relevant research.
- 3. Connection between proposed research and problem.

#### Quality and technical merit.

1. Awareness of the state of current research or technology.

- 2. Soundness of methodology and analytic and technical approach.
- 3. Feasibility of proposed project and awareness of pitfalls.
- 4. Innovation and creativity (when appropriate).

#### Impact of the proposed project.

- 1. Potential for significant advances in scientific or technical understanding of the problem.
- 2. Potential for significant advances in the field.
- 3. Relevance for improving the policy and practice of criminal justice and related agencies and improving public safety, security, and quality of life.
- 4. Affordability and cost-effectiveness of proposed end products, when applicable (e.g., purchase price and maintenance costs for a new technology or cost of training to use the technology).
- 5. Perceived potential for commercialization and/or implementation of a new technology (when applicable).

#### Capabilities, demonstrated productivity, and experience of applicants.

- 1. Qualifications and experience of proposed staff.
- 2. Demonstrated ability of proposed staff and organization to manage the effort.
- 3. Adequacy of the plan to manage the project, including how various tasks are subdivided and resources are used.
- 4. Successful past performance on NIJ grants and contracts (when applicable).

#### Budget.

- 1. Total cost of the project relative to the perceived benefit.
- 2. Appropriateness of the budget relative to the level of effort.
- 3. Use of existing resources to conserve costs.

#### Dissemination strategy.

- 1. Well-defined plan for the grant recipient to disseminate results to appropriate audiences, including researchers, practitioners, and policymakers.
- 2. Suggestions for print and electronic products NIJ might develop for practitioners and policymakers.

#### Relevance of the project for policy and practice.

Higher quality proposals clearly explain the practical implications of the project. They connect technical expertise with criminal justice policy and practice. To ensure that the project has strong relevance for policy and practice, some researchers and technologists collaborate with practitioners and policymakers. You may include letters showing support from practitioners, but they carry less weight than clear evidence that you understand why policymakers and practitioners would benefit from your work and how they would use it. While a partnership may affect State or local activities, it should also have broader implications for others across the country.

## **Review Process**

NIJ is firmly committed to the competitive process in awarding grants. All proposals under this solicitation will be subjected to independent peer-review panel evaluations. External peer-review panelists consider both technical and programmatic merits. Panelists are selected based on their expertise in subject areas pertinent to the proposals.

Peer-review panelists will evaluate proposals using the criteria listed above. NIJ staff then make recommendations to the NIJ Director. The Director makes award decisions.

**Reasons for rejection:** NIJ may reject applications that are incomplete, do not respond to the scope of the solicitation, do not comply with format requirements, or are submitted after the deadline. No additions to the original submission are allowed.

When awards will be made: All applicants, whether they are accepted or rejected, will be notified. The review and approval process takes about 6 months. You should not propose to begin work until at least 6 months after the proposal deadline on the cover of this solicitation. Also, you should not expect to receive notification of a decision for at least 6 months after that date. Lists of awards are updated regularly on NIJ's Web site at http://www.ojp.usdoj.gov/nij/funding.htm.

## **Additional Requirements**

- Civil Rights Compliance
- Confidentiality and Human Subjects Protection Compliance
- Anti-Lobbying Act
- Financial and Government Audit Requirements
- National Environmental Policy Act (NEPA) Compliance
- DOJ Information Technology Standards
- Single Point of Contact Review
- Nonsupplanting of State and Local Funds
- Criminal Penalty for False Statements
- Compliance with Office of Justice Programs Financial Guide
- Suspension or Termination of Funding
- Funding to Faith-Based and Community Organizations
- Nonprofit Organizations
- Government Performance and Results Act (GPRA)

- Rights in Intellectual Property
- Federal Funding Accountability and Transparency Act (FFATA)

We strongly encourage you to review the information pertaining to these additional requirements prior to submitting your application. Additional information for each can be found at <u>http://www.ojp.usdoj.gov/funding/otherrequirements.htm</u>.

If your proposal is funded, you will be required to submit several reports and other materials, including:

**Final substantive report:** The final report should be a comprehensive overview of the project and should include a detailed description of the project design, data, and methods; a full presentation of scientific findings; and a thorough discussion of the implications of the project findings for criminal justice practice and policy. It must contain an abstract of no more than 400 words and an executive summary of no more than 2,500 words.

A draft of the final report, abstract, and executive summary must be submitted 90 days before the end date of the grant. The draft final report will be peer reviewed upon submission. The reviews will be forwarded to the principal investigator with suggestions for revisions. The author must then submit the revised final report, abstract, and executive summary by the end date of the grant. The abstract, executive summary, and final report must be submitted in both paper and electronic formats.

For program evaluation studies, the final report should include a section on measuring program performance. This section should outline the measures used to evaluate program effectiveness, modifications made to those measures as a result of the evaluation, and recommendations regarding these and other potential performance measures for similar programs. (This information will be particularly valuable to NIJ and other Federal program agencies in implementing performance measures for federally funded criminal justice programs.)

**Interim reports:** Grantees must submit quarterly financial reports, semi-annual progress reports, a final progress report, and, if applicable, an annual audit report in accordance with Office of Management and Budget Circular A–133. Future awards and fund drawdowns may be withheld if reports are delinquent.