



JAN. 05

NIJ

Solicitation for Proposals

**Quantitative Research on
Friction Ridge Patterns**

Notice:

You *must* submit your application using the Office of Justice Programs' automated Grants Management System. Paper applications will not be accepted. We suggest you begin the process as soon as possible. To start the process, go to <http://www.ojp.usdoj.gov/fundopps.htm>.

Deadline:

February 25, 2005

8 p.m. eastern time

SL 000698

U.S. Department of Justice
Office of Justice Programs
810 Seventh Street N.W.
Washington, DC 20531

John Ashcroft
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the National Institute of Justice can be found
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<http://www.ojp.usdoj.gov/nij>

Office of Justice Programs
Partnerships for Safer Communities
<http://www.ojp.usdoj.gov>

Quantitative Research on Friction Ridge Patterns

I. Introduction

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. NIJ provides objective, independent, evidence-based knowledge and tools to enhance the administration of justice and public safety. NIJ solicits proposals to inform its search for the knowledge and tools to guide policy and practice.

NIJ seeks proposals for quantitative studies of friction ridge skin pattern variations relevant to fingerprint and/or palmprint comparisons for the purpose of identification or exclusion. Criminal justice agencies use fingerprints and palmprints for comparisons to latent print impressions collected as evidence at crime scenes. The forensic science community seeks a more comprehensive understanding of the empirical basis of friction ridge impression evidence to extend its use and facilitate the work of the fingerprint examiner.

This research may include examining the frequency of friction ridge structure combinations and distinctive patterns, the permanence of an individual's friction ridge structures, the biological and environmental factors that affect friction ridge structures, or developing tools to statistically measure and evaluate the quality of print comparisons and the strength of print comparison data.

Due date: The due date is listed on the cover of this announcement and on the NIJ Web site at <http://www.ojp.usdoj.gov/nij/funding.htm>. Extensions to the deadlines are generally not granted.

Page limit: The program narrative section of your proposal must not exceed 30 double-spaced 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.

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.

How to submit applications to NIJ: Instructions for applying are in "Guidelines: How to Submit Applications," available on the NIJ Web site at <http://www.ojp.usdoj.gov/nij/funding.htm>.

II. Proposal Topics

Forensic friction ridge examination (i.e., fingerprint, palmprint, and footprint) has long been recognized and accepted as a standard for personal identification. Criminal justice agencies use fingerprints and palmprints for comparisons to latent print impressions collected as evidence at crime scenes. The forensic science community seeks a more comprehensive understanding of the empirical basis of friction ridge impression evidence to extend its use and facilitate the work of the fingerprint examiner.

Proposals submitted under this solicitation should demonstrate a familiarity with forensic friction ridge examination procedures and applicable technologies; the biology/physiology of friction ridge skin; and general scientific methodology as it applies to friction ridge analysis.

NIJ strongly encourages researchers responding to this solicitation to seek guidance from or partner with appropriate forensic identification experts, or appropriate professional identification associations. Such collaborations foster a greater understanding of the issues unique to friction ridge structure analyses and may strengthen the scope of the proposed research plan. The proposal must include evidence of this collaboration (e.g., memorandum of agreement, letter of intent).

Suggested Areas of Research:

A. Quantitative studies of friction ridge skin pattern variations relevant to fingerprint and/or palmprint comparisons for the purpose of identification or exclusion. The research methodology should ensure that adequate population size and proper sampling methods are used.¹ Proposals should focus on the evaluation of one or more of the following characteristics in either a complete or partial fingerprint and/or palmprint impression:

1. Pattern type and ridge flow (Level I).
2. Ridge endings, bifurcations, and dots (Level II).
3. Ridge and pore morphology (Level III).
4. Incidental features such as creases (both permanent and age-related), scars, warts, and others.

Examples of such research can include but are not limited to the following:

- Studies examining the frequency of friction ridge structure combinations and/or distinctive patterns within a population or among populations.

¹ NIJ may be able to provide assistance in obtaining samples for research purposes. Contact Lois Tully at 202–307–0694 for further information.

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- Studies examining the permanence of friction ridge structures within an individual.
 - Studies examining biological or environmental factors that may affect friction ridge structures.

B. Tools that will provide a quantitative measure/statistical evaluation of the following:

1. The quality of fingerprint and/or palmprint impressions.
2. The strength of fingerprint and/or palmprint comparison data.

III. General Requirements and Guidance

NIJ is asking you to submit a proposal that states the problem under investigation (including goals and objectives of the proposed project) and the relevance of the project to public policy, practice, or theory. The narrative program section should state the research question and objectives and explain how the work will contribute to knowledge and practice. It should describe in sufficient detail the research methods and analytic strategy.

Format your proposal as follows:

1. Abstract of no more than 400 words.
2. Program narrative.
 - a. Research question or problem.
 - b. Research goals and objectives.
 - c. Research design and methods.
 - d. Implications for knowledge and practice.
 - e. Dissemination plan for project deliverables.
 - f. Description of estimated costs.
 - g. Staffing plan.
 - h. Timeline.
3. Tables, figures, charts, and appendixes (if applicable).

Instructions for submitting proposals can be found in “Guidelines: How to Submit Applications,” (available at <http://www.ojp.usdoj.gov/nij/funding.htm>) and the Office of Justice Programs Grants Management System Handbook (available at <http://www.ojp.usdoj.gov/fundopps.htm>).

A. Submit applications online: Paper applications are not accepted. Applications must be submitted through the Office of Justice Programs’ online Grants Management System. NIJ suggests you begin the process early, especially if this is the first time you have used the system. To begin, go to <http://www.ojp.usdoj.gov/fundopps.htm>. There are three types of documents that can be uploaded to an application package: PDFs, Word documents, and text documents. The Grants Management System does not consider an application complete

until three files are uploaded: (1) "Program Narrative." (2) "Budget Detail Worksheet and Narrative," and (3) "Other Program Attachments."

- B. Relevance of the project for policy and practice:** Higher quality proposals clearly explain the practical implications of the project. They connect technical expertise with 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.
- C. Equal opportunity for all applicants:** It is OJP's policy that faith-based and community organizations that statutorily qualify as eligible applicants under OJP programs are invited and encouraged to apply for awards. Faith-based and community organizations will be considered for an award on the same basis as any other eligible applicants and, if they receive an award, will be treated on an equal basis with non-faith-based and community organization grantees in the administration of such awards. No eligible applicant or grantee will be discriminated 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.
- D. 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.
- E. Number of grants to be awarded:** NIJ's grant award process is highly competitive. The number of awards NIJ makes is always subject to the availability of funds and the number and quality of applications received.
- F. 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>.

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- G. Financial audits are required:** If your organization spends \$500,000 or more of Federal funds during the fiscal year, you may be asked to submit an organization-wide financial and compliance audit report before any award is made. The audit must be performed in accordance with the U.S. Government Accountability Office Government Accounting Standards and must conform to Chapter 19 (“Audit Requirements”) of the Office of Justice Programs’ Financial Guide (available at <http://www.ojp.usdoj.gov/FinGuide>). You may include the costs of complying with these audits in the proposed budget submitted as part of your application. Detailed information regarding the independent audit is available in Office of Management and Budget Circular A-133 (available at <http://www.whitehouse.gov/omb/circulars>).
- H. An environmental assessment may be required:** All award recipients must comply with the National Environmental Policy Act (NEPA). To ensure NEPA compliance, NIJ may require some award recipients to submit additional information.
- I. Protection of confidentiality:** Federal regulations require applicants for NIJ funding to outline specific procedures for protecting private information about individuals as part of the Privacy Certificate submitted with the application package. For additional information, see “Guidelines: How to Submit Applications,” <http://www.ojp.usdoj.gov/nij/funding.htm>.
- J. 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 nine-digit 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. NIJ will use the DUNS number throughout the grant life cycle. Obtaining a DUNS number is a free, one-time activity. Obtain one by calling 1–866–705–5711 or by applying online at <http://www.dunandbradstreet.com>. Individuals are exempt from this requirement.
- K. Funds cannot be used to lobby:** Under the Anti-Lobbying Act (18 U.S.C. § 1913), grantees generally may not use funds to support the enactment, repeal, or modification of any law, regulation, or policy at any level of government. For additional information on rules and regulations, see “Guidelines: How to Submit Applications” at <http://www.ojp.usdoj.gov/nij/funding.htm> and OJP’s Financial Guide at <http://www.ojp.usdoj.gov/FinGuide>.

L. What will *not* be funded:

1. Provision of training or direct service.
2. Proposals to purchase or implement equipment (e.g., AFIS), materials, supplies, or other items solely for the purpose of enhancing your agency's capacity or operations.
3. Work that will be funded under another specific solicitation.
4. Proposals that do not contain a research and/or development component or are otherwise nonresponsive to the general goals of this solicitation.

M. Cost of proposed work: All awards are subject to the availability of appropriated funds. The number and cost of awards is dependent on funds available and the number of high-quality proposals received.

N. Call for assistance:

For technical guidance about using the Grants Management System, call the hotline at 1-888-549-9901. For questions about this solicitation, the research being solicited, or other NIJ funding opportunities, see the NIJ web site at <http://www.ojp.usdoj.gov/nij> or contact NIJ at 202-307-2942.

IV. Selection Criteria

NIJ is firmly committed to the competitive process in awarding grants. All proposals are subjected to an independent peer-review panel evaluation. 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 below. NIJ staff then make recommendations to the NIJ Director. The Director makes final award decisions.

Successful applicants must demonstrate the following:

A. Understanding of the problem and its importance.

Inclusion of appropriate scientific and/ or legal citations and other information to demonstrate awareness of the current status of friction ridge examinations and the potential contribution of the proposed research to the existing body of knowledge.

B. 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).

C. 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).

D. 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).

E. 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.

F. 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.

V. Requirements for Successful Applicants

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

- A. Final 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 author 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 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.)

- B. Interim reports:** Grantees must submit quarterly financial reports, semi-annual progress reports, and a final progress report. Future awards and fund drawdowns may be withheld if reports are delinquent. Post-award reporting requirements are described in “Guidelines: How to Submit Applications,” available at <http://www.ojp.usdoj.gov/nij/funding.htm>.
- C. Materials concerning protection of confidential information and human subjects:** Recipients of NIJ research funds must comply with Federal regulations concerning the protection of private information about individuals. Recipients also must comply with Federal regulations concerning protection of human subjects. In general, all research involving human subjects that is conducted or supported by NIJ funds must be reviewed and approved by an Institutional Review Board before Federal funds are expended for that research. NIJ may also ask grant recipients for additional information related to privacy and human subjects testing.

Additional general information regarding NIJ’s requirements for privacy and protection of human subjects appears in “Guidelines: How to Submit Applications,” available at <http://www.ojp.usdoj.gov/nij/funding.htm>. Complete information about NIJ’s requirements can be found at <http://www.ojp.usdoj.gov/nij/humansubjects>.

- D. Electronic data:** Some grant recipients will be required to submit electronic data and supporting documentation, such as a codebook or dictionary, capable of being re-analyzed and used by other researchers. The materials must be submitted by the end date of the grant. Grant applicants should ensure that the proposed timeline and budget accommodate these requirements.
- E. Performance guidelines:** As part of government-wide efforts to measure the performance of Federal funding, in May 2002, the White House issued guidance on how to evaluate the

performance of Federal research programs. Research should be: (1) relevant—that is, important and appropriate for meeting the needs of the field, (2) of high quality, and (3) well-managed by grantees and well-monitored by the Federal agency. Therefore, in addition to the reporting requirements discussed above, a grantee’s performance on an award made under this solicitation will be evaluated on whether the final research report was (1) relevant 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; (2) of high quality as assessed by peer reviewers; and (3) well-managed as measured by whether significant interim project milestones were achieved, final deadlines were met, and costs remained within approved limits. For more information see “Guidelines: How to Submit Applications,” available at <http://www.ojp.usdoj.gov/nij/funding.htm>.

Tips for Submitting Your Application

1. Begin the application process early—especially if you have never used the online Grants Management System before. NIJ will not accept applications received after the closing date and time listed on the cover. To start the process, go to <http://www.ojp.usdoj.gov/fundopps.htm>.
2. Review “Guidelines: How to Submit Applications” for complete instructions, available at <http://www.ojp.usdoj.gov/nij/funding.htm>.
3. Although your proposal may budget for the purchase of equipment if the equipment is necessary to conduct the project, NIJ will not fund applications that are primarily to purchase equipment, materials, or supplies.
4. Call for help:
 - For technical guidance about the Grants Management System, call the hotline at 1–888–549–9901.

For questions about this solicitation, the research being solicited, or other NIJ funding opportunities, contact NIJ at 202–305–7807 or visit NIJ’s Web site at <http://www.ojp.usdoj.gov/nij/funding.htm>.

View or print a copy of this document from the NIJ Web site (<http://www.ojp.usdoj.gov/nij/funding.htm>) or request one by calling NCJRS at 1–800–851–3420 or e-mailing askncjrs@ncjrs.org.

The National Institute of Justice is the research, development, and evaluation agency of the U.S. Department of Justice.

NIJ provides objective, independent, evidence-based knowledge and tools to enhance the administration of justice and public safety.

NIJ is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance, the Bureau of Justice Statistics, the Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime.