Notices regarding the solicitation “Research and Evaluation for the Testing and Interpretation of Physical Evidence in Publicly Funded Forensic Laboratories, Fiscal Year 2020”

March 27, 2020: Many of our solicitations encourage research partnerships and require applicants to include a strong letter of support, signed by an appropriate decision-making authority from each proposed partnering entity.

NIJ continues to strongly encourage prospective applicants to submit executed agreements necessary to carrying out the work proposed with applications if they can be obtained, but with an understanding of the circumstances surrounding the pandemic, NIJ will accept applications without them.

Applicants selected for award will be required to submit completed agreements by January 1, 2021. Funds will be withheld until such agreements have been received.

The original solicitation document begins on the next page.
Research and Evaluation for the Testing and Interpretation of Physical Evidence in Publicly Funded Forensic Laboratories, Fiscal Year 2020

FY 2020 Competitive Research Grant Solicitation

CFDA No. 16.560

Grants.gov Solicitation Number: NIJ-2020-17293

Solicitation Release Date: March 19, 2020

Application Deadline: 11:59 p.m. eastern time on May 18, 2020

The U.S. Department of Justice (DOJ), Office of Justice Programs (OJP), National Institute of Justice (NIJ) is seeking applications for funding for research and evaluation studies to produce practical knowledge that has the potential to improve the examination and interpretation of physical evidence in forensic science laboratories. This program furthers the Department’s mission by sponsoring research to provide objective, independent, evidence-based knowledge and tools to meet the challenges of criminal justice, particularly at the State and local levels.

This solicitation incorporates the OJP Grant Application Resource Guide by reference. The OJP Grant Application Resource Guide provides guidance to applicants on how to prepare and submit applications for funding to OJP. If this solicitation expressly modifies any provision in the OJP Grant Application Resource Guide, the applicant is to follow the guidelines in this solicitation as to that provision.

Eligibility (Who may apply)

In general, NIJ is authorized to make grants to, or enter into contracts or cooperative agreements with eligible entities as listed below:

- States (including territories);
- Units of local government;
- Federally recognized Indian tribal governments that perform law enforcement functions (as determined by the Secretary of the Interior);
- Nonprofit and for-profit organizations (including tribal nonprofit and for-profit organizations); and
- Institutions of higher education (including tribal institutions of higher education).

Foreign governments, foreign organizations, and foreign colleges and universities are not eligible to apply. Federal agencies are eligible to apply. (Any award made to a federal agency will be made as an inter-agency reimbursable agreement.)

Applicants must be, or be partnered with, publicly funded forensic science laboratories that are currently accredited by an independent accrediting or certifying forensic science organization. Publicly funded forensic science laboratories include state, regional, county, municipal, and tribal agencies.

All recipients and subrecipients (including any for-profit organization) must forgo any profit or management fee.

NIJ will consider applications under which two or more entities would carry out the federal award; however, only one entity may be the applicant. Any others must be proposed as subrecipients (subgrantees). The applicant must be the entity that would have primary responsibility for carrying out the award, including administering the funding and managing the entire project. For additional information on subawards, see the OJP Grant Application Resource Guide.

Contact Information

For technical assistance with submitting an application, contact the Grants.gov Customer Support Hotline at 1-800-518-4726 or 1-606-545-5035 (international), at https://www.grants.gov/web/grants/support.html, or at support@grants.gov. The Grants.gov Support Hotline operates 24 hours a day, 7 days a week, except on federal holidays.

An applicant that experiences unforeseen Grants.gov technical issues beyond its control that prevent it from submitting its application by the deadline must email the NIJ contact identified below within 24 hours after the application deadline to request approval to submit its application after the deadline. Additional information on reporting technical issues appears under “Experiencing Unforeseen Grants.gov Technical Issues” in the “How To Apply (Grants.gov)” section in the OJP Grant Application Resource Guide.

For assistance with any other requirements of this solicitation, contact the National Criminal Justice Reference Service (NCJRS) Response Center: toll-free at 1-800-851-3420; via TTY at 301-240-6310 (hearing impaired only); email grants@ncjrs.gov; fax to 301-240-5830; or web chat at https://webcontact.ncjrs.gov/ncjchat/chat.jsp. The NCJRS Response Center hours of operation are 10:00 a.m. to 6:00 p.m. eastern time, Monday through Friday, and 10:00 a.m. to 8:00 p.m. eastern time on the solicitation close date. General information on applying for NIJ awards can be found at https://nij.ojp.gov/funding. Answers to frequently asked questions that may assist applicants are posted at https://nij.ojp.gov/funding/frequently-asked-questions-about-applying-grants-and-cooperative-agreements.
Deadline Details

Applicants must register with Grants.gov at https://www.grants.gov/web/grants/register.html prior to submitting an application. All applications are due by 11:59 p.m. eastern time on May 18, 2020.

To be considered timely, an application must be submitted by the application deadline using Grants.gov, and the applicant must have received a validation message from Grants.gov that indicates successful and timely submission. OJP urges applicants to submit applications at least 72 hours prior to the application due date, to allow time for the applicant to receive validation messages or rejection notifications from Grants.gov, and to correct in a timely fashion any problems that may have caused a rejection notification.

An applicant must use the Add Attachment button to attach a file to its application. Do not click the paperclip icon to attach files. This action will not attach the files to the application. After adding an attachment, select the View Attachment button to confirm you attached the correct file. To remove the file, select the Delete Attachment button.

OJP encourages all applicants to read this Important Notice: Applying for Grants in Grants.gov.

For additional information, see the “How to Apply (Grants.gov)” section in the OJP Grant Application Resource Guide.
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A. Program Description

Overview

With this solicitation, NIJ seeks proposals for research and evaluation projects that will:

1. Identify and inform the forensic community of best practices through the evaluation of existing laboratory protocols; and
2. Have a direct and immediate impact on laboratory efficiency, and assist in making laboratory policy decisions.

The intent of this program is to direct the findings of the research and evaluation towards the identification of the most efficient, accurate, reliable, and cost-effective methods for the identification, analysis, and interpretation of physical evidence for criminal justice purposes. The most current forensic science operational needs discussed at the FY 2020 Forensic Science Technology Working Group (TWG) meeting may be found on NIJ.ojp.gov. NIJ’s Forensic Science TWG assists in identifying and prioritizing operational needs and requirements of the field, and are intended to facilitate proposal development.

Additional research needs of the forensic science community can be found at the Organization of Scientific Area Committees website.


Program-Specific Information

This solicitation seeks applications for research and evaluation studies to produce practical knowledge that has the potential to improve the examination and interpretation of physical evidence in forensic science laboratories.

Proposals are expected to identify the forensic science discipline(s) intended to benefit from the project. The forensic science discipline(s) should be listed in the key words on the title page. Some of these disciplines are listed below:

- DNA and forensic biology;
- Forensic crime scene analysis;
- Forensic anthropology and forensic odontology;
• Seized Drugs;
• Fire debris analysis and arson scene investigations;
• Firearms and toolmark identification;
• Latent print;
• Footwear/tire tread examination;
• Questioned documents;
• Trace evidence;
• Forensic toxicology; and
• Medicolegal death investigations, including forensic pathology.

Goals, Objectives, Deliverables, and Expected Scholarly Products

NIJ’s Research and Evaluation for the Testing and Interpretation of Physical Evidence in Publicly Funded Forensic Laboratories program is intended to meet the following goals and objectives. Proposals should address at least one of the goals specified below:

1. Assessing existing laboratory protocols – improve the understanding of scientific rationale underpinning existing laboratory processes.

To achieve this goal, applicants should perform research and evaluation of existing laboratory schemes and methods to determine possible improvements. Examples of such projects include:

• Evaluation of minimum acceptance criteria of analytical data, such as mass spectra, generated in case samples;
• Evaluation of accuracy gained from additional orthogonal testing of controlled substance samples;
• Evaluation of the effectiveness of a blind verification program for technical reviews; and
• Evaluation of implementation of software and statistical methods used for the interpretation of DNA mixtures.


To achieve this goal, applicants should conduct research to compare emerging methods to those currently in use to accomplish the same purpose in publicly funded forensic laboratories. These evaluations should consider factors such as accuracy, reliability, cost, and analysis time. Examples of such projects include:
• Comparison of a newly developed broad spectrum method to existing multi-step method(s).

• Comparison of methodology or instrumentation new to the laboratory or field to instrumentation that is currently used in the laboratory.

**Researchers who have developed methods and/or technologies that are ready for evaluation in forensic lab practice, including previous and current NIJ research grantees, are strongly encouraged to apply.**

Proposals should employ a scientific approach to determine how to assess the testing and processing of physical evidence. These approaches should take into consideration general variables, such as accuracy, reliability, cost-effectiveness, and efficiency — and make clear which of these aspects may need improvement. Every effort should be made to validate the research using actual casework samples. If this is not possible, applications should describe barriers preventing the use of casework samples, and detailed methodology for creating realistic proxy samples.

In order to foster collaboration between emerging forensic science researchers and forensic science laboratories, as well as to ensure the direct applicability of the results of this research to lab practice, non-publicly funded laboratory applicants must demonstrate a partnership with an appropriate lab.

To assist researchers in identifying appropriate practitioner collaborators, NIJ has developed a site for labs to indicate their interest in participating in research. Interested labs are encouraged to visit [https://nij.ojp.gov/topics/articles/connecting-researchers-publicly-funded-forensic-laboratories](https://nij.ojp.gov/topics/articles/connecting-researchers-publicly-funded-forensic-laboratories) to provide their contact information.

Applicants who wish to propose a collaboration, in the form of a subaward as part of their application, are advised to consult **Section D** of this solicitation, which describes required documents for proposals involving subrecipients.

NIJ also strongly encourages applicants to seek guidance from a statistician in order to ensure that rigorous testing measures are employed. Areas that may benefit from a statistician include, but are not limited to, research design (e.g., experimental design, planning sample size or sampling designs, designing data collection methods), selection and application of appropriate statistical methods, and how to use software to perform data analyses. Such associations foster a greater understanding of the testing and validation issues unique to the field of forensic science, and may strengthen the scope of the proposed application.

**Final Research Report.** Any recipient of an award under this solicitation will be expected to submit a final research report. Additional information on the final research report requirement for the solicitation is posted on the Research, Development, and Evaluation Grant Award Requirements section on NIJ’s website.

In addition to these deliverables (and the required reports and data on performance measures described in **Section F. Federal Award Administration Information**), NIJ expects scholarly products to result from each award under this solicitation, taking the form of one or more published, peer-reviewed, scientific journal articles, and/or (if appropriate) law review journal articles, book chapter(s) or book(s) in the academic press, technological prototypes, patented inventions, or similar scientific products. All protocols, standard operating procedures, methods,
and reports produced as a result of each award under this solicitation will be made publicly available by NIJ.

Some projects may be chosen for technology evaluation or technology transition activities. More information, including examples of previous workshops and evaluations, can be found through the following links: https://nij.ojp.gov/topics/forensics/forensic-laboratory-operations and http://www.forensiccoe.org.

NIJ expects that there will be an equal effort to make the research findings accessible to practitioner and policymaker audiences through articles in trade publications, the development of training manuals, policy briefs, conferences, webinars, and articles for newspapers or magazines.

The Goals, Objectives, Deliverables, and Expected Scholarly Products are directly related to the performance measures that demonstrate the results of the work completed.

**Performance Measures**

OJP will require each successful applicant to submit regular performance data that demonstrate the results of the work carried out under the award (see “General Information about Post-Federal Award Reporting Requirements” in Section F. Federal Award Administration Information).

Applicants should visit OJP’s performance measurement page at www.ojp.gov/performance for an overview of performance measurement activities at OJP.

The application should demonstrate the applicant’s understanding of the performance data reporting requirements for this grant program and detail how the applicant will gather the required data should it receive funding.

Please note that applicants are not required to submit performance data with the application. Performance measures information is included as an alert that successful applicants will be required to submit performance data as part of the reporting requirements under an award.
<table>
<thead>
<tr>
<th>Objective</th>
<th>Performance Measure(s)</th>
<th>Data Recipient Provides</th>
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| Conduct research in science, technology, engineering, and/or mathematics having clear implications for criminal justice policy and practice in the United States. | 1. Relevance to the needs of the field as measured by whether the project’s substantive scope did not deviate from the funded project or any subsequent agency-approved modifications to the scope.  
2. Quality of the research as demonstrated by the scholarly products that result in whole or in part from work funded under the NIJ award, such as published, peer-reviewed, scientific journal articles, and/or (as appropriate for the funded project) law review journal articles, book chapter(s) or book(s) in the academic press, technological prototypes, patented inventions, or similar scientific products.  
3. Quality of management as measured by such factors as whether significant project milestones were achieved, reporting and other deadlines were met, and costs remained within approved limits.  
4. Number of technologies fielded as a result (in whole or in part) of work funded under the NIJ award. | 1. Quarterly financial reports, semi-annual and final progress reports, and products of the work performed under the NIJ award (including, at minimum, a final research report).  
If applicable, an annual audit report.  
2. List of citation(s) to all scholarly products that resulted in whole or in part from work funded under the NIJ award.  
3. If applicable, each data set that resulted in whole or in part from work funded under the NIJ award.  
4. Description of all technologies fielded as a result (in whole or in part) of work funded under the NIJ award. |

**Evaluation Research**

If an application includes an evaluation research component (or consists entirely of evaluation research), the application is expected to propose the most rigorous evaluation design appropriate for the research questions to be addressed. If the primary purpose of the evaluation is to determine the effectiveness or impact of an intervention (e.g., program, practice, or policy), the most rigorous evaluation designs may include random selection and assignment of participants (or other appropriate units of analysis) to experimental and control conditions. In cases where randomization is not feasible, applicants should propose a strong quasi-experimental design that can address the risk of selection bias.

Applications that include evaluation research should consider the feasibility of including cost/benefit analysis. In cases where evaluations find that interventions have produced the intended benefit, cost/benefit analysis provides valuable and practical information for practitioners and policymakers that aids decision making.

Evaluation research projects may also address a wide range of research questions beyond those focused on the effectiveness or impact of an intervention. Different research designs may
be more appropriate for different research questions and at different stages of program
development. The intervention strategies, setting, other contextual factors, and resources
should be taken into account when selecting an evaluation design. In all cases, applications are
expected to propose the most rigorous evaluation design appropriate for the research questions
to be addressed.

Applicants are encouraged to review evidence rating criteria at
https://www.crimesolutions.gov/about_starttofinish.aspx for further information on high-quality
evaluation design elements.

B. Federal Award Information

Total funding for this solicitation, and the number of awards made, will depend on the availability
of funds, the quality of the applications, and other pertinent factors. NIJ funding for an individual
research or development project rarely exceeds a $500,000 total project cost. In FY 2019, the
average forensic science research and development award under this solicitation was
approximately $300,000 per year. The average project period was between one and three
years. Information on previous years’ awards is provided for reference — applicants should
propose costs using calculations based on the specific activities proposed in their narratives.
Cost estimates should be focused on maximizing the potential for success of the proposed
project, rather than past averages.

An applicant should base its federal funding request and period of performance on the actual
requirements of the research, and not necessarily on the anticipated amount of funding
available in FY 2020 for awards under this solicitation. However, to expedite the budget
approval process, applicants are encouraged to break out their budgets by project year or by
phases in the event that NIJ chooses to fund the project partially or incrementally. Applicants
are strongly encouraged to submit realistic proposals, including a reasonable project timeline
and end date, as project extensions may not be granted.

To allow time for (among other things) any necessary post-award review and financial clearance
by OJP of the proposed budget and for any associated responses or other action(s) that may be
required of the recipient, applicants should propose an award start date of January 1, 2021.

If the applicant is proposing a project that reasonably could be conducted in discrete phases,
with each phase resulting in completion of one or more significant, defined milestones, then NIJ
strongly recommends that the applicant structure the application — specifically including the
narrative, expected scholarly products, timelines/milestones, and budget detail worksheet and
budget narrative — to clearly define each phase. (This is particularly the case if the applicant
proposes a project that will exceed — in cost or the length of the period of performance — the
amount or length of time anticipated for an individual award (or awards) under this solicitation.)
Given limitations on the availability to NIJ of funds for awards for research, development, and
evaluation, this information will assist NIJ in considering whether partial funding of applications
would be productive. (If, in FY 2020, NIJ elects to fund only certain phases of a proposed
project, the expected scholarly products from the partial-funding award may, in some cases,
vary from those described above.)

Applications proposing research involving partnerships with other agencies, such as publicly
funded forensic laboratories, must include a strong letter of cooperation/support or
administrative agreement, signed by an appropriate decision-making authority from each
proposed partnering agency. If selected for award, grantees will be expected to have a formal agreement in place with partnering agencies by January 1, 2021.

Under this solicitation, any particular applicant entity may submit more than one application, as long as each application proposes a different project in response to the solicitation. Also, an entity may be proposed as a subrecipient (“subgrantee”) in more than one application.

NIJ may elect to fund applications submitted under this FY 2020 solicitation in future fiscal years, dependent on, among other considerations, the merit of the applications and on the availability of appropriations.

All awards are subject to the availability of appropriated funds and to any modifications or additional requirements that may be imposed by law.

**Type of Award**

NIJ expects to make awards under this solicitation as grants. See the “Administrative, National Policy, and Other Legal Requirements” section of the OJP Grant Application Resource Guide for additional information. Any funds provided to another federal agency will be made as an inter-agency reimbursable agreement.

**Please note:** Any recipient of an award under this solicitation will be required to comply with DOJ regulations on confidentiality and protection of human subjects. See “Requirements related to Research” under “Overview of Legal Requirements Generally Applicable to OJP Grants and Cooperative Agreements – FY 2020 Awards” in the OJP Funding Resource Center.

**Financial Management and System of Internal Controls**

Award recipients and subrecipients (including recipients or subrecipients that are pass-through entities) must, as described in the Part 200 Uniform Requirements as set out at 2 C.F.R. 200.303, comply with standards for financial and program management. See OJP Grant Application Resource Guide for additional information.

**Budget Information**

**What will not be funded:**

- Applications primarily to purchase equipment, materials, or supplies, or to contract or purchase training, validation, or other services that will complete the majority of the proposed research project. (A budget may include these items if they are necessary to conduct research, development, demonstration, evaluation, or analysis.) Proposals that include equipment purchases should include a discussion of how federally-funded equipment is proposed to be used after the funded work has been completed and/or the project period has ended. Note that OJP may issue specific equipment disposition instructions in appropriate circumstances.

- Applications that are not responsive to this specific solicitation. This includes:

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1 The "Part 200 Uniform Requirements" means the DOJ regulation at 2 C.F.R Part 2800, which adopts (with certain modifications) the provisions of 2 C.F.R. Part 200.
Proposals that do not propose assessing current lab processes, or otherwise do not respond to the specific goals of this solicitation.

Proposals that do not clearly address criminal justice concerns in the United States.

- Work that will be funded under another specific solicitation.
- Costs associated with conducting conferences. A conference is a symposium, seminar, workshop, or any other organized and formal meeting, whether conducted face-to-face or via the Internet, where individuals assemble (or meet virtually) to exchange information and views or explore or clarify a defined subject, problem, or area of knowledge, whether or not a published report results from such meeting. A meeting where a gathering discusses general matters as part of a normal course of doing business is not considered a conference. Funds may be used to attend conferences for the purposes of disseminating research findings.
- Proposals with the sole purpose of processing or analyzing casework samples.

Cost Sharing or Matching Requirement

See “Cofunding” paragraph under item 4 (“Budget Information and Associated Documentation”) under “What an Application Should Include” in Section D. Application and Submission Information.

Please see the OJP Grant Application Resource Guide for information on the following:

- **Pre-agreement Costs (also known as Pre-award Costs)**
- **Limitation on Use of Award Funds for Employee Compensation; Waiver**
- **Prior Approval, Planning, and Reporting of Conference/Meeting/Training Costs**
- **Costs Associated with Language Assistance** (if applicable)

C. Eligibility Information

For eligibility information, see title page.

For information on cost sharing or match requirements, see “What an Application Should Include” in Section D. Application and Submission Information.

D. Application and Submission Information

This solicitation expressly modifies the OJP Grant Application Resource Guide by not incorporating the “Disclosure of Process Related to Executive Compensation” provisions in the “Application Attachments” section of the OJP Grant Application Resource Guide.
What an Application Should Include

The following application elements MUST be included in the application submission for an application to meet the basic minimum requirements (BMR) to advance to peer review and receive consideration for funding: Program Narrative, Budget Detail Worksheet (including Budget Narrative), resumes/curriculum vitae of key personnel, and Proof of Forensic Laboratory Accreditation for the involved publicly funded forensic laboratory. (For the purposes of this solicitation, “key personnel” means the principal investigator, any and all co-principal investigators, and other significant contributors.)

See the “Application Elements and Formatting Instructions” section of the OJP Grant Application Resource Guide for information on what happens to an application that does not contain all the specified elements, or that is nonresponsive to the scope of the solicitation.

1. Application for Federal Assistance (Standard Form (SF)-424)

   The SF-424 is a required standard form used as a cover sheet for submission of pre-applications, applications, and related information. See the OJP Grant Application Resource Guide for additional information on completing the SF-424.

   Intergovernmental Review: This solicitation (“funding opportunity”) is not subject to Executive Order 12372. (In completing the SF-424, an applicant is to answer question 19 by selecting the response that the “Program is not covered by E.O. 12372.”)

2. Project Abstract

   The project abstract is a very important part of the application, and serves as an introduction to the proposed project. NIJ uses the project abstract for a number of purposes, including assignment of the application to an appropriate review panel. If the application is funded, the project abstract typically will become public information and be used to describe the project.

   Applications should include a high quality project abstract that summarizes the proposed project in no more than 400 words. Project abstracts should be:

   - Written for a general public audience.
   - Submitted as a separate attachment with “Project Abstract” as part of its file name.

   As a separate attachment, the project abstract will not count against the page limit for the program narrative.

3. Program Narrative

   The program narrative section of the application should not exceed 14 double-spaced pages in 12-point font with 1-inch margins, of which a minimum of seven (7) pages should be dedicated to the description of the project/program design and implementation. If included in the main body of the program narrative, tables, charts, figures, and other illustrations count
toward the 14-page limit for the narrative section. The project abstract, table of contents, appendices, and government forms do not count toward the 14-page limit.

The program narrative should be attached as a separate file with an appropriately descriptive file name.

If the program narrative fails to comply with these length-related restrictions, NIJ may negatively consider such noncompliance in peer review and in final award decisions.

The following sections should be included as part of the program narrative.²

Program Narrative Guidelines:

a. Title Page (not counted against the 14-page program narrative limit)

The title page should include the title of the project, submission date, funding opportunity number, and the name and complete contact information (that is, address, telephone number, and e-mail address) for both the applicant and the principal investigator, and key words.

b. Resubmit Response (if applicable) (not counted against the 14-page program narrative limit)

If an applicant is resubmitting an application presented previously to NIJ, but not funded, the applicant should indicate this. A statement should be provided, no more than two pages, addressing: (1) the title, submission date, and NIJ-assigned application number of the previous application, and (2) a brief summary of revisions to the application, including responses to previous feedback received from NIJ.

c. Table of Contents and Figures (not counted against the 14-page program narrative limit)

d. Main Body

The main body of the program narrative should describe the proposed project in depth. The following sections should be included as part of the program narrative:

- Statement of the Problem and Research Questions. The statement of the problem should address the need for research in this area. Applicants should discuss current gaps in data, research, and knowledge, including those for particular justice sectors, for certain populations, and to answer questions relevant to current policy and practice needs and public interests. As part of this discussion, applicants should present a review of previous literature and discuss previous research related to these problems.

² As noted earlier, if the proposed program or project reasonably could be conducted in discrete phases, with each phase resulting in completion of one or more significant, defined milestones, then NIJ strongly recommends that the applicant structure the application – specifically including the narrative, expected scholarly products, timelines/milestones, and budget detail worksheet and budget narrative – to set out each phase clearly. (In appropriate cases, the expected scholarly product(s) from a particular phase may vary from those described above.) See generally “Goals, Objectives, Deliverables, and Expected Scholarly Products” under “Program-Specific Information,” above.
The statement of the problem should:

- Explain the importance of the problem or critical barrier to progress in the field proposed.
- Explain how the proposed project may improve forensic practice through scientific knowledge and/or technical capability. Describe how concepts, methods, technologies, or services that drive the forensic science field will be changed if the proposed aims are achieved.

This section should also identify the proposed research questions and discuss the purpose, goals, and objectives of the proposed project.

- **Project Design and Implementation.** (This section should account for a minimum of seven (7) pages of the main body of the narrative.) Applicants should provide a detailed description of the strategies to implement this research project and address the research questions. Design elements should follow directly from the research project’s goals and objectives and address the program-specific information noted on page 5. Applicants should describe the research methodology in detail and demonstrate the validity and usefulness of the data they will collect. Applicants should consider the rigor and soundness of the methodology and analytical and technical approaches for the proposed research and address the feasibility of the proposed project and potential challenges or problems in carrying out the activities.

This section should:

- State concisely the goals of the proposed research.
- Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Describe the experimental design and methods proposed, and how they will achieve robust and unbiased results. Include how the data will be collected, analyzed, and interpreted as well as any resource sharing plans as appropriate.
- Power and effect size: Use power analyses to describe the range of effect sizes detectable by the study. Address relevant features of the analytic plan, such as the model(s) to be tested, the extent of multiple testing, and what significance level would be used for testing. Include all appropriate parameters. If the study design requires separate analysis of subject groups, provide power analyses for each category. If there is a plan to test for environment effects, address the power for detection of these effects.
- Data analyses: Provide a thorough plan for data analyses. Include: analytical approaches to be used and their justification; plans for quality control analyses; methods to control for possible confounding effects, and how false positive rates will be controlled in light of multiple testing; etc. If there is a plan to analyze the data obtained with earlier data, or to perform comparisons to determine success, describe your strategy for that process.
• **Potential Impact.** Applicants should describe the potential impact of the research and how it may inform or improve criminal or juvenile justice-related policy, practice, or theory in the United States.

Applicants should:

- Summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the discipline(s) involved.

- Explain the criminal justice significance of the proposed study.

- Explain how the application challenges, and seeks to shift, current forensic practice paradigms.

The discussion of impact should include a discussion of the deliverables, including planned scholarly products indicated in the project-specific information on page 6 and a plan for dissemination to appropriate audiences. Applicants should identify plans to produce or make available to broader interested practitioners and policy makers in a form that is designed to be readily accessible and useful to them.

• **Capabilities/Competencies.** This section should describe the experience and capability of the applicant organization, key staff, and any proposed subgrantees (including consultants) that the applicant will use to implement and manage this effort and the federal funds under this award, highlighting any previous experience implementing projects of similar scope, design, and magnitude.

Under this section, applicants should address:

- Facilities and other resources: Describe how the scientific environment in which the research will be done contributes to the probability of success (e.g., institutional support, physical resources, and intellectual rapport). In describing the scientific environment in which the work will be done, discuss ways in which the proposed studies will benefit from unique features of the scientific environment or subject populations, or will employ useful collaborative arrangements. If there are multiple performance sites, describe the resources available at each site.

- Equipment: List major items of equipment already available for this project and, if appropriate, identify location and pertinent capabilities.

- Senior/key personnel profile: Describe each senior/key personnel member’s role in the project, and why the individual is well-suited for that role. The relevant factors may include: aspects of past training; previous experimental work on this specific topic or related topics; technical expertise; collaborators or scientific environment; and/or past performance in this or related fields. Senior/key personnel are defined as all individuals who contribute in a substantive, meaningful way to the scientific development or execution of the project whether or not salaries are requested. Consultants should be included if they meet this definition.
  - Principal Investigator (PI) Profile should be listed first.
Senior/key personnel profile: Any remaining senior/key personnel profiles should be listed in alphabetical order. While alphabetical order is preferred, it is not required. However, be aware that these profiles will appear in the application in the order provided by the applicant. Therefore, peer reviewers will see them in the order presented. Those with a postdoctoral/postgraduate role should be included.

Other significant contributors (OSCs): OSCs are those individuals who commit to contribute to the scientific development or execution of the project, but do not commit any specified measurable effort (i.e., person months) to the project. These individuals are typically presented at effort of “zero person months” or “as needed.” Individuals with measurable effort may not be listed as other significant contributors (OSCs). Consultants should be included if they meet the OSC definition. OSCs should be listed after all senior/key persons.

- Experience and capacity to design and implement rigorous research and data analysis projects.
- Experience producing and disseminating meaningful deliverables.

Applicants should also outline the management plan and organization that connects to the goals and objectives of the project.

e. Appendices (not counted against the 14-page program narrative limit) include:

- Bibliography/references.
- Any tools/instruments, questionnaires, tables/charts/graphs, or maps pertaining to the proposed project that are supplemental to such items included in the main body of the narrative.
- Curriculum vitae or resume of the principal investigator and any and all co-principal investigators. In addition, curriculum vitae, resume, or biographical sketches of all other individuals (regardless of “investigator” status) who will be significantly involved in substantive aspects of the proposed project (including, for example, individuals such as statisticians used to conduct proposed data analysis).
- To assist OJP in assessing actual or apparent conflicts of interest (including such conflicts on the part of prospective reviewers of the application, a complete list of the individuals named or otherwise identified anywhere in the application (including in the budget or in any other attachment) who will or may work (or advise or consult) on the proposed research, development, or evaluation project. This applies to all such individuals, including, for example, individuals who are or would be employees of the applicant or employees of any proposed subrecipient entity, any individuals who themselves may be a subrecipient, and individuals who may (or will) work without compensation (such as advisory board members). This appendix to the program narrative is to include, for each listed individual: name, title, employer, any other potentially-pertinent organizational affiliation(s), and the individual’s proposed roles.
and responsibilities in carrying out the proposed project. If the application identifies any specific entities or organizations (other than the applicant) that will or may work (or advise or consult) on the proposed project, without also naming any associated individuals, the name of each such organization also should be included on this list.

Applicants should use the “Proposed Project Staff, Affiliation, and Roles” form available on the NIJ webpage to prepare this list.

If the application (including the budget) identifies any proposed non-competitive agreements that are or may be considered procurement "contracts" (rather than subawards) for purposes of federal grants administrative requirements the applicant also must list the entities with which the applicant proposes to contract. Applicants should provide this list as a separate sheet entitled "Proposed non-competitive procurement contracts."

For information on distinctions — for purposes of federal grants administrative requirements — between subawards and procurement contracts under awards, see “Budget Information and Associated Documentation,” below.

- Proposed project timeline and expected milestones.
- List of any previous and current NIJ awards to the applicant and investigator(s), including the NIJ-assigned award numbers and a brief description of any scholarly products that resulted in whole or in part from work funded under the NIJ award(s). (See “Goals, Objectives, Deliverables, and Expected Scholarly Products” under “Program-Specific Information,” above, for definition of "scholarly products.")
- List of other agencies, organizations, or funding sources to which this application has been submitted (if applicable).
- Applicants proposing to use incentives or stipends payments as part of their research project design, must submit an incentive or stipend approval request, as a separate document, according to the requirements set forth at https://nij.ojp.gov/funding/participant-support-costs-and-incentives-social-science-research.
- Data archiving plan. Applicants should anticipate that NIJ will require (through special award conditions, that data sets resulting in whole or in part from projects funded under this solicitation be submitted for archiving with the NACJD. See https://nij.ojp.gov/funding/data-archiving-plans-nij-funding-applicants.
Applications should include as an appendix a brief plan — labeled “Data Archiving Plan” — to comply with data archiving requirements. The plan should provide brief details about proposed data management and archiving, including submission to NIJ (through NACJD) of all files and documentation necessary to allow for future efforts by others to reproduce the project’s findings and/or to extend the scientific value of the data set through secondary analysis. Pertinent files and documentation include, among other things, qualitative and quantitative data produced, instrumentation and data collection forms, codebook(s), any specialized programming code necessary to reproduce all constructed measures and the original data analysis, description of necessary de-identification procedures, and (when required) a copy of the privacy certificate and informed consent protocols.

The plan should be one or two pages in length and include the level of effort associated with meeting archiving requirements.

Note that recipients are strongly encouraged to submit required data sets at least 90 days before the end of the period of performance.

- Letters of cooperation/support or administrative agreements from organizations collaborating in the project, such as universities, publicly funded forensic laboratories, law enforcement and correctional agencies (if applicable).

Please see the OJP Grant Application Resource Guide for information on the following:

4. Budget Information and Associated Documentation in the Budget Preparation and Submission Information section.

Budget document(s) should be attached as a separate file with an appropriately descriptive file name.

The following paragraph (on “Cofunding”) expressly modifies the “Cost Sharing or Matching Requirement” provisions in the OJP Grant Application Resource Guide. The applicant is to follow the guidance in the following paragraph instead of the guidance stated under the “Cost Sharing or Matching Requirement” heading in the OJP Grant Application Resource Guide.

Cofunding: An award made by NIJ under this solicitation may account for up to 100 percent of the total cost of the project. The application should indicate whether it is feasible for the applicant to contribute cash, facilities, or services as non-federal support for the project. The application should identify generally any such contributions that the applicant expects to make and the proposed budget should indicate in detail which items, if any, will be supported with non-federal contributions.

5. Indirect Cost Rate Agreement

6. Tribal Authorizing Resolution (if applicable)

7. Financial Management and System of Internal Controls Questionnaire (including applicant disclosure of high-risk status)
8. **Disclosure of Lobbying Activities**

9. ** Applicant Disclosure of Pending Applications**

10. **Applicant Disclosure and Justification – DOJ High Risk Grantees**³ (if applicable)

11. **Research and Evaluation Independence and Integrity**

12. **Additional Attachments**

   a. **Proof of Forensic Laboratory Accreditation (required)**

      Acceptable types of documentation of current accreditation include: an electronic (scanned) copy of the current accreditation certificate(s), a digital photograph of the current accreditation certificate(s), or a letter from the accrediting body that includes the certificate number. Additionally, if a certificate references another document that contains key information on the type or scope of the accreditation, provide a copy of that supplemental documentation. Independent accrediting or certifying organizations may include the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD-LAB), Forensic Quality Services (FQS), the American Association for Laboratory Accreditation (A2LA), or other appropriate accrediting bodies. **Applicants should list the name of their accrediting body in the key words on the title page.**

   b. **Potential Environmental Impact Coversheet and Checklist – National Environmental Policy Act (NEPA)**

      Each applicant is to submit an NIJ Programmatic Coversheet and Checklist with its application to assist NIJ in assessing the potential environmental impacts of the activities proposed for funding by the applicant. Specifically, the applicant is expected to:

      • Carefully read the [Programmatic Environmental Assessment](https://nij.ojp.gov/funding/national-environmental-policy-act-nepa);

      • Complete the [Cover Sheet and the attached the Programmatic Checklist](https://nij.ojp.gov/funding/national-environmental-policy-act-nepa); and

      • Attach the completed documents to the grant application.

      The applicant should also submit a Cover Sheet and NIJ Programmatic Checklist for any organization identified in the Budget Detail Worksheet that will receive grant funds through a sub-award or procurement contract to perform any of the following activities: new construction or renovations that change the basic prior use of a facility or significantly change the size; research and/or technology development that could be expected to have an effect on the environment; or implementation of programs involving the use of chemicals.


³ A “DOJ High Risk Grantee” is a recipient that has received a DOJ High-Risk designation based on a documented history of unsatisfactory performance, financial instability, management system or other internal control deficiencies, or noncompliance with award terms and conditions on prior awards, or that is otherwise not responsible.
How To Apply (Grants.gov)

Applicants must register in and submit applications through Grants.gov, a primary source to find federal funding opportunities and apply for funding. Find information on how to apply in response to this solicitation in the OJP Grant Application Resource Guide.

Registration and Submission Steps

Applicants will need the following identifying information when searching for the funding opportunity on Grants.gov.

- NIJ-2020-17293.

For information on each registration and submission step, see the OJP Grant Application Resource Guide.

E. Application Review Information

Review Criteria

Applications that meet basic minimum requirements will be evaluated by peer reviewers using the following review criteria.

Statement of the Problem and Research Questions (Understanding of the problem, research questions, and their importance) – 15%

1. Demonstrated understanding of the need to determine and employ best processes for a procedure currently used by a forensic science field/discipline.
2. Demonstrated importance of research questions, goals and objectives, including alignment with the aims of the solicitation.
3. Demonstrated awareness of the state of current protocols widely used by the forensic science community within the proposed forensic science discipline of the application.

Project Design and Implementation (Quality and technical merit) – 40%

1. Soundness of methods and analytic and technical approach to addressing the stated aim(s) of the proposed project. The overall strategy, methodology, and analyses should be well-reasoned and appropriate to accomplish the specific aims of the project.
2. Feasibility of proposed project. Detailed description and justification of the sample type and sample size to be tested and approaches for data analysis are thorough and appropriate to accomplish the specific aims of the project.
3. Awareness of potential pitfalls of proposed project design and feasibility of proposed actions to minimize and/or mitigate them.
4. Feasibility of completing the deliverables noted in the solicitation.

**Potential Impact** – 30%

Potential for a significant scientific or technical advance(s) that will improve criminal/juvenile justice in the United States, such as:

1. Potential to determine and increase the awareness of best practices for the evaluation and interpretation of physical evidence for the forensic science community.

2. Potential for significantly improved understanding of the scientific rationale underpinning existing laboratory processes.

3. Potential for innovative solution to protocols to increase the efficiency, accuracy, reliability, or cost-effectiveness for the analysis and interpretation of physical evidence.

4. Proposed plan to produce, or to make available to broader interested audiences, such as criminal/juvenile justice practitioners or policymakers, as well as practitioners in other, related fields, summary information from the planned scholarly products of the project.

**Capabilities/Competencies** (Capabilities, demonstrated productivity, and experience of the applicant organization and proposed project staff) – 15%

1. Qualifications and experience of proposed project staff (that is, the principal investigator, any and all co-principal investigators, and all other individuals (and organizations) identified in the application (regardless of “investigator” status) who will be significantly involved in substantive aspects of the proposed project).

2. Demonstrated ability of the applicant organization to implement the proposed strategies and manage the effort.

3. Relationship between the capabilities/competencies of the proposed project staff (including the applicant organization) and the scope and strategies of the proposed project.

4. Strength of the scientific environment (e.g., laboratory support, equipment and other physical resources, or collaborative arrangements) in which the work will be done, and its contribution to the probability of success.

**Budget**

In addition, peer reviewers will consider and may comment on the following additional items in the context of scientific and technical merit.

1. Total cost of the project relative to the perceived benefit (cost effectiveness).

2. Appropriateness of the budget relative to the level of effort.

3. Use of existing resources to conserve costs.
4. Alignment of the proposed budget with proposed project activities.

Review Process

NIJ reviews the application to make sure that the information presented is reasonable, understandable, measurable, achievable, and consistent with the solicitation.

The following five paragraphs in this solicitation expressly modify the “Application Review Information” provisions in the OJP Grant Application Resource Guide. An applicant is to follow the guidance in these five paragraphs instead of the guidance stated under the “Application Review Information” heading in the Guide.

Peer reviewers will review the applications submitted under this solicitation that meet basic minimum requirements. For purposes of assessing whether an application meets basic minimum requirements and should proceed to further consideration, OJP screens applications for compliance with those requirements. Although specific requirements may vary, the following are common requirements applicable to all solicitations for funding under OJP programs:

- The application must be submitted by an eligible type of applicant.
- The application must request funding within programmatic funding constraints (if applicable).
- The application must be responsive to the scope of the solicitation.
- The application must include all items necessary to meet the basic minimum requirements.
- The application, if submitted by an applicant that is a DOJ High Risk Grantee,\(^4\) or is designated “high risk” by a federal grant-making agency outside of DOJ, must not have been determined by the Director to pose a substantial risk of program implementation failure, based on 1) the applicant’s lack of sufficient progress in addressing required corrective actions necessary for removal of the DOJ High Risk Grantee (or non-DOJ high risk) designation, 2) the nature and severity of the issues leading to or accompanying the DOJ High Risk Grantee (or non-DOJ high risk) designation, and/or 3) the applicant’s expected ability to manage grant funds and achieve grant goals and objectives.

For a list of the application elements that MUST be included in the application submission in order for an application to meet the basic minimum requirements, see “What an Application Should Include” under Section D. Application and Submission Information.

Peer review panels will evaluate, score, and rate applications that meet basic minimum requirements. NIJ may use internal peer reviewers, external peer reviewers, or a combination, to assess applications on technical merit using the solicitation’s review criteria. An internal reviewer is a current DOJ employee who is well-versed or has expertise in the subject matter of this solicitation. An external peer reviewer is an expert in the subject matter of a given

\(^4\) See “Applicant Disclosure and Justification – DOJ High Risk Grantees” under “What an Application Should Include,” above, for a definition of “DOJ High Risk Grantee.”
solicitation who is not a current DOJ employee. Peer reviewers' ratings and any resulting recommendations are advisory only, but are considered carefully.

Other important considerations for NIJ include geographic diversity, strategic priorities, available funding, the planned scholarly products, and the extent to which the Budget Detail Worksheet and Budget Narrative accurately explain project costs that are reasonable, necessary, and otherwise allowable under federal law and applicable federal cost principles.

Pursuant to the Part 200 Uniform Requirements, before award decisions are made, OJP also reviews information related to the degree of risk posed by the applicant. Among other things to help assess whether an applicant that has one or more prior federal awards has a satisfactory record with respect to performance, integrity, and business ethics, OJP checks whether the applicant is listed in SAM as excluded from receiving a federal award.

In addition, if OJP anticipates that an award will exceed $250,000 in federal funds, OJP also must review and consider any information about the applicant that appears in the non-public segment of the integrity and performance system accessible through SAM (currently, the Federal Awardee Performance and Integrity Information System, FAPIIS).

Important note on FAPIIS: An applicant, at its option, may review and comment on any information about itself that currently appears in FAPIIS and was entered by a federal awarding agency. OJP will consider any such comments by the applicant, in addition to the other information in FAPIIS, in its assessment of the risk posed by the applicant.

All final award decisions will be made by Director of the National Institute of Justice, who may take into account not only peer review ratings and NIJ recommendations, but also other factors as indicated in this section. In addition to peer review ratings, considerations for award recommendations and decisions may include, but are not limited to, planned scholarly products, proposed budgets, past performance (including scholarly products) under prior NIJ and OJP awards, research independence and integrity, strategic priorities, and available funding when making awards.

F. Federal Award Administration Information

Please see the OJP Grant Application Resource Guide for information on the following:

- Federal Award Notices

- Administrative, National Policy, and Other Legal Requirements

If selected for funding, in addition to implementing the funded project consistent with the OJP-approved application, the recipient must comply with all award conditions, and all applicable requirements of federal statutes and regulations (including applicable requirements referred to in the assurances and certifications executed in connection with award acceptance).

For additional information on these legal requirements, see the “Administrative, National Policy, and Other Legal Requirements” section in the OJP Grant Application Resource Guide.
• **Information Technology (IT) Security Clauses**

• **General Information about Post-Federal Award Reporting Requirements**

In addition to the deliverables described in Section A. Program Description, any recipient of an award under this solicitation will be required to submit certain reports and data.

**Required reports.** Recipients typically must submit quarterly financial reports, semi-annual progress reports, final financial and progress reports, and, if applicable, an annual audit report in accordance with the Part 200 Uniform Requirements or specific award conditions. Applicants should anticipate that progress reports will be required to follow the non-budgetary components of the Research Performance Progress Report (RPPR) template/format. General information on RPPRs may be found at [www.nsf.gov/bfa/dias/policy/rppr/](http://www.nsf.gov/bfa/dias/policy/rppr/). Future awards and fund drawdowns may be withheld if reports are delinquent. (In appropriate cases, OJP may require additional reports.)

See the [OJP Grant Application Resource Guide](#) for additional information on specific post-award reporting requirements, including performance measures data.

**G. Federal Awarding Agency Contact(s)**

For questions directed to the Federal Awarding Agency, see NCJRS contact information on page 2.

For contact information for Grants.gov, see page 2

**H. Other Information**

Please see the [OJP Grant Application Resource Guide](#) for information on the following:


- **Provide Feedback to OJP**
Appendix A: Application Checklist

Research and Evaluation for the Testing and Interpretation of Physical Evidence in Publicly Funded Forensic Laboratories, Fiscal Year 2020

This application checklist has been created as an aid in developing an application.

What an Applicant Should Do:

Prior to Registering in Grants.gov:
- Acquire a DUNS Number (see OJP Grant Application Resource Guide)
- Acquire or renew registration with SAM (see OJP Grant Application Resource Guide)

To Register with Grants.gov:
- Acquire AOR and Grants.gov username/password (see OJP Grant Application Resource Guide)
- Acquire AOR confirmation from the E-Biz POC (see OJP Grant Application Resource Guide)

To Find Funding Opportunity:
- Search for the Funding Opportunity on Grants.gov (see page 18)
- Access Funding Opportunity and Application Package (see OJP Grant Application Resource Guide)
- Sign up for Grants.gov email notifications (optional) (see OJP Grant Application Resource Guide)
- Read Important Notice: Applying for Grants in Grants.gov
- Read OJP policy and guidance on conference approval, planning, and reporting available at ojp.gov/financialguide/DOJ/PostawardRequirements/chapter3.10a.htm (see OJP Grant Application Resource Guide)

After Application Submission, Receive Grants.gov Email Notifications That:
- (1) application has been received,
- (2) application has either been successfully validated or rejected with errors (see OJP Grant Application Resource Guide)

If No Grants.gov Receipt, and Validation or Error Notifications are Received:
- Contact NIJ regarding technical difficulties (see OJP Grant Application Resource Guide)

Overview of Post-Award Legal Requirements:

Scope Requirement:
- The federal amount requested is within the allowable limit(s).

Eligibility Requirement: See cover page.
**What an Application Should Include:**

The following items are **critical** application elements required to pass basic minimum requirements review. An application that OJP determines does not include the application elements that must be included in the application submission in order for the application to meet the basic minimum requirements, will neither proceed to peer review, nor receive further consideration.

- **Program Narrative** (see page 13)
- **Budget Detail Worksheet (including Budget Narrative)** (see [OJP Grant Application Resource Guide](#))
- **Resumes/curriculum vitae/biosketches of key personnel** (see page 17)
- **Proof of Forensic Laboratory Accreditation (critical element)** (see page 20)

- **Application for Federal Assistance (SF-424)** (see [OJP Grant Application Resource Guide](#))
- **Project Abstract** (see page 13)
- **Appendices** (see page 17)
  - Bibliography/references
  - Any tools/instruments, questionnaires, tables/charts/graphs, or maps pertaining to the proposed study that supplement those in the narrative
  - List (to the extent known) of all proposed project staff members
  - Proposed project timeline and expected milestones
  - Human Subjects Protection Paperwork
  - Privacy Certificate
  - List of any previous and current NIJ awards to applicant organization and investigator(s)
  - Letters of cooperation/support or administrative agreements from organizations collaborating in the project, or letters of intent to establish agreements (if applicable)
- **Indirect Cost Rate Agreement (if applicable)** (see [OJP Grant Application Resource Guide](#))
- **Tribal Authorizing Resolution (if applicable)** (see [OJP Grant Application Resource Guide](#))
- **Financial Management and System of Internal Controls Questionnaire** (see [OJP Grant Application Resource Guide](#))
- **Disclosure of Lobbying Activities (SF-LLL)** (see [OJP Grant Application Resource Guide](#))
- **Applicant Disclosure of Pending Applications** (see [OJP Grant Application Resource Guide](#))
- **Applicant Disclosure and Justification – DOJ High-Risk Grantees (if applicable)** (see [OJP Grant Application Resource Guide](#))
- **Research and Evaluation Independence and Integrity** (see [OJP Grant Application Resource Guide](#))

**Additional Attachments:**

- **Request and Justification for Employee Compensation; Waiver (if applicable)** (see [OJP Grant Application Resource Guide](#))
- **Potential Environmental Impact Coversheet and Checklist (NEPA)** (see page 20)