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NIJ FY 2022 Invited to Apply - Funding to Support the Research and Development in Forensic Science for Criminal Justice Purposes Program

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Overview

The <u>U.S. Department of Justice</u> (DOJ), <u>Office of Justice Programs</u> (OJP), <u>National Institute of Justice</u> (NIJ) seeks applications for funding to support research and development in forensic science for criminal justice purposes. This program furthers the DOJ's mission by supporting the development of new knowledge and tools to address the challenges of crime and justice in the United States.

This solicitation incorporates the <u>OJP Grant Application Resource Guide</u> by reference. The OJP Grant Application Resource Guide provides guidance to applicants to prepare and submit applications for funding. 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.

Solicitation Categories

This solicitation does not include Solicitation Categories.

Eligible Applicants:

Other

Other

Only the applicants that received an official invitation letter from NIJ are able and eligible to apply. Please refer to that letter for the eligibility requirements.

To advance Executive Order 13929 Safe Policing for Safe Communities, the Attorney General determined that all state, local, and university or college law enforcement agencies must be certified by an approved independent credentialing body or have started the certification process to be eligible for FY 2022 DOJ discretionary grant funding. To become certified, the law enforcement agency must meet two mandatory conditions: (1) the agency's use-of-force policies adhere to all applicable federal, state, and local laws and (2) the agency's use-of-force policies prohibit chokeholds except in situations where use of deadly force is allowed by law. The certification requirement also applies to law enforcement agencies receiving DOJ discretionary grant funding through a subaward. For detailed information on this certification requirement, please visit https://cops.usdoj.gov/SafePolicingEO to access the Standards for Certification on Safe Policing for Safe Communities, the Implementation Fact Sheet, and the List of Designated Independent Credentialing Bodies.

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). For additional information on subawards, see the <u>OJP Grant Application Resource Guide</u>.

Contact Information

For technical assistance with submitting the Application for Federal Assistance standard form (SF-424) and a Disclosure of Lobbying Activities form (SF-LLL) in Grants.gov, contact the Grants.gov Customer Support Hotline at 800-518-4726, 606-545-5035, at <u>Grants.gov customer support</u>, or <u>support@grants.gov</u>. The Grants.gov Support Hotline operates 24 hours a day, 7 days a week, except on federal holidays.

For technical assistance with submitting the **full application** in DOJ's Justice Grants System (JustGrants), contact the JustGrants Service Desk at 833–872–5175 or <u>JustGrants.Support@usdoj.gov</u>. The JustGrants Service Desk operates 5 a.m. to 9 p.m. EST Monday - Friday and 9 a.m. to 5 p.m. Saturday, Sunday, and Federal holidays.

For assistance with any other requirements of this solicitation, contact the NIJ Forensic Science R&D Program Team by email at <u>Forensic.Research@usdoj.gov</u>.

Submission Information

Applications will be submitted to DOJ in two steps.

<u>Step 1:</u> The applicant must submit by the Grants.gov deadline the required Application for Federal Assistance standard form (SF)-424 and a Disclosure of Lobbying Activities (SF-LLL) form when they register in Grants.gov at <u>https://www.grants.gov/web/grants/register.html.</u> To register in Grants.gov, the applicant will need to ensure that its System for Award Management (SAM) registration is current.

Step 2: The applicant must then submit the **full application**, including attachments, in JustGrants at <u>JustGrants.usdoj.gov</u>. To be considered timely, the full application must be submitted in JustGrants by the JustGrants application deadline. OJP encourages applicants to review the "How to Apply" section in the <u>OJP Grant Application</u> <u>Resource Guide</u> and the <u>JustGrants website</u> for more information, resources, and training.

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Program Description

Overview

OJP is committed to advancing work that promotes civil rights and racial equity, increases access to justice, supports crime victims and individuals impacted by the justice system, strengthens community safety and protects the public from crime and evolving threats, and builds trust between law enforcement and the community.

With this solicitation, NIJ seeks proposals for rigorous basic or applied research and development projects. An NIJ forensic science research and development grant supports a discrete, specified, circumscribed project that will:

- 1. Increase the body of knowledge to guide and inform forensic science policy and practice; or
- 2. Lead to the production of useful material(s), device(s), system(s), or method(s) that have the potential for forensic application.

The intent of this program is to direct the findings of basic scientific research; foster research and development in broader scientific fields applicable to forensic science; and support ongoing forensic science research toward the development of highly-discriminating, accurate, reliable, cost-effective, and rapid methods for the identification, analysis, and interpretation of forensic evidence for criminal justice purposes. Projects should address the challenges and needs of the forensic science community, including but not limited to, the operational needs discussed at NIJ's FY 2020 Forensic Science Technology Working Group (TWG) meeting, which may be found on <u>NIJ.ojp.gov</u>. Additional research needs of the forensic science community can be found at the Organization of Scientific Area Committees <u>website</u>. Although the goals and deliverables of proposed projects are not required to result in immediate solutions to the posted challenges and needs, proposals should, at a minimum, address the foundational work that will lead to eventual solutions.

Statutory Authority: Title I of the Omnibus Crime Control and Safe Streets Act of 1968 (sections 201 and 202); the Homeland Security Act of 2002 (sections 231–233, 235); and 28 U.S.C. § 530C.

Specific Information

This solicitation seeks applications for funding to support basic or applied research and development forensic science projects.

Funding priorities for this program are expected to align with the Department of Justice's mission. Proposed projects should address the current technology challenges encountered by forensic scientists by generating new knowledge or tools that will lead to better methods, move the state-of-the-art forward, or otherwise resolve identified issues so as to assist law enforcement, enhance public safety, prevent and reduce crime, and ensure the fair and impartial administration of justice. Although the goals and deliverables of proposed projects are not required to result in immediate solutions to the posted challenges and needs, proposals should, at a minimum, address the foundational work that will lead to eventual solutions.

Indicators of successful proposals may include relationships/collaborations with operational, accredited crime laboratories, and demonstrated abilities to produce scholarly products. See the next sections for more details.

Goals, Objectives, Deliverables, and Timeline

Goals/Objectives

Proposals should address at least one of the goals specified below. Proposed projects that address more than one goal should be separated into discrete phases that clearly identify the goal to be addressed by each phase (additional information regarding the phasing of proposals can be found in Federal Award Information). Proposed projects should include goals that speak to specific forensic science needs and challenges which, if resolved, will aid the criminal justice community to enforce the law, enhance public safety, prevent and reduce crime, and ensure fair and impartial administration of justice. Although some late-stage applied research and development projects may be able to propose tangible or direct solutions, early-stage research projects are not required to result in immediate solutions; however, these early-stage research projects should clearly explain how the proposed objectives, once achieved, will produce knowledge that contributes to eventual solutions.

Foundational/Basic Research Goal: Improve the understanding of the accuracy, reliability, and measurement validity of forensic science disciplines. Applicants may refer to <u>Strengthening Forensic Science in the United States: A</u> <u>Path Forward</u> by the National Research Council of the National Academies Sciences, Engineering, and Medicine to review historical material relevant to this goal. If addressing this goal, projects should meet at least one of the following objectives:

- Conduct basic scientific research in the physical, life, and cognitive sciences that is designed to increase the knowledge underlying forensic science disciplines intended for use in the criminal justice system. For the purposes of this objective, basic research studies proposed must include activities with broad application to forensic sciences related to the criminal justice system. Proposals should describe the anticipated impact of the study on one or more forensic science disciplines.
- Perform studies that examine the degree of accuracy and reliability of methods used by forensic scientists to achieve a more complete understanding of the scientific basis of forensic evidence and the interpretation of that evidence. Studies may also examine various processes within forensic methods, from the initial acceptance and examination of evidence for its probative value and quality, to the final interpretation of forensic results, including assessment of error rate.
- Conduct foundational research studies designed to further the understanding of quantifiable measures of
 uncertainty in the conclusions of forensic analyses, regardless of the sources of uncertainty. Studies should
 seek to establish limits of reliability and accuracy that forensic methods can achieve with respect to varying
 conditions of forensic evidence.
- Develop new approaches to forensic analysis, including quantitation of analyses that are currently qualitative in nature (e.g., in the development of quantitative studies related to friction ridge analysis or other impression and pattern evidence).

Applied Research Goal: Increase knowledge or understanding necessary to guide criminal justice policy and practice related to the forensic sciences. To achieve this goal, projects should meet at least one of the following objectives:

- Perform applied research to increase knowledge of physical evidence and/or its behavior. Examples include, but are not limited to, the study of fluid transfer and fluid dynamics of certain biological fluids (e.g., blood) to increase understanding of patterns deposited at crime scenes; the examination of chemical properties of evidence for the purpose of identifying source materials; studies of the behavior of chemical compounds of forensic interest in biological systems; research to better understand aged, degraded, limited, damaged, inhibited, or otherwise compromised physical evidence (e.g., studies on the effect of environmental factors on physical evidence; studies to increase the overall understanding of the processes and mechanisms that result in the inability to obtain analytical results from evidence).
- Perform evaluation studies of technologies that are expected to have application to forensic sciences in criminal justice settings. The purpose of an evaluation must be to test a new, modified, or previously untested technology to determine whether it is effective for forensic science application. Proposals for evaluation studies should systematically use scientific methods to measure efficiency, implementation, and utility of the technology being evaluated. The primary intent of a proposed evaluation study must be to generate new knowledge or contribute to the knowledge in the forensic scientific literature. Furthermore, knowledge gained from an evaluation study should be applicable to sites other than the one(s) being evaluated. An evaluation study should result in a report suitable for publication and dissemination to guide criminal justice policy and/or practice related to the forensic sciences. The results of an evaluation study should contribute to **generalizable knowledge that can be applied beyond a particular program/geography, and can inform other researchers, practitioners, and/or policymakers**.

Development Goal: Produce novel and useful materials, devices, systems, or methods that have the potential for forensic application for criminal justice purposes. For development projects, proposals should demonstrate potential for increased quality of result and/or decreased time/cost for forensic analyses as compared to current standard practices. In order to achieve this goal, projects should meet at least one of the following objectives:

- Improve the "front end" of the forensic analysis processes. Examples include, but are not limited to, the
 development of improved methods for detection and identification of evidence at crime scenes; the development
 of improved screening methods to help assess the probative value of forensic evidence (i.e., onsite presumptive
 and/or confirmatory analysis of evidence); the development of improved means to remotely detect forensic
 evidence at a crime scene in order to overcome scene hazards and prevent evidence contamination; the
 development of nondestructive or minimally destructive methods for evidence preservation and/or storage.
- Develop instrumental systems to improve analysis throughput and the reliability, reproducibility, selectivity, and/or sensitivity of current methods used in crime laboratories for forensic analysis.

- Develop tools or methods that can separate the various components of a mixture. The separation method must be successful on typical forensic samples (limited in yield, etc.) and must not reduce the efficiency of downstream forensic methods. Examples of mixtures include, but are not limited to, cells from different sources (e.g., sperm cells from female epithelial cells, epithelial cells from different sources), products of DNA processes (e.g., polymerase chain reaction [PCR] products in mixtures from two or more individuals), and trace materials.
- Develop improved tools for examining aged, degraded, limited, damaged, inhibited, or otherwise compromised
 physical evidence. Examples include, but are not limited to, the development of tools to determine the condition
 of the evidence to assist crime laboratory analysts in selecting the appropriate analytical approach, the
 development of methods to repair damaged evidence (without compromising sample integrity) to increase the
 likelihood of obtaining an analytical result, improvements to the methods for detection and/or removal or
 remediation of substances that inhibit the success of analysis, or other methods that will maximize the success
 rate of the analysis of compromised evidence.
- Develop novel approaches to forensic science methods for analysis and interpretation. Examples include streamlined, portable, high-throughput, more informative, more sensitive, less susceptible to inhibition, and other novel methods for analysis of forensic evidence for criminal justice purposes.
- Develop novel approaches and/or enhance current approaches to interpret forensic data derived from physical evidence, including an assessment of the significance of association. This may include development of databases[1] (comprehensive, searchable, easily accessible, secure databases for use in determining the statistical strength of analytical results obtained from evidence found at crime scenes), and/or analyses that provide quantitative measures and statistical evaluation of forensic evidence.

Deliverables

<u>Final Technical Summary</u>. Any recipient of an award under this solicitation will be expected to submit a final technical summary. Additional information on the final technical summary requirement for the solicitation is posted on NIJ's webpage.

<u>Required Data Sets and Associated Files and Documentation</u>. Any recipient of an award under this solicitation will be expected to submit all data sets in accordance with their data archiving plan (see Data Archiving Plan under "Application and Submission Information") that result in whole or in part from the work funded by the award, along with associated files and any documentation necessary for others to reproduce the project's findings. Additional information on the data archiving requirement is posted on NIJ's <u>webpage</u>.

In addition to these deliverables (and the required reports and data on performance measures), 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) book chapter(s) or book(s) in the academic press, technological prototypes, patented inventions, or similar scientific products. Awardees are encouraged to publish their research using open access options. Grant funds may be used for costs associated with open access publication. NIJ expects that there will be an equal effort to make the research findings accessible to practitioner and policymaker audiences.

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 link: http://www.forensiccoe.org.

NIJ encourages researchers to seek guidance from, or partner with, crime laboratories. Such associations foster a greater understanding of the issues unique to the field of forensic science and may strengthen the scope of the proposed research plan. To assist researchers in identifying appropriate practitioner partners, NIJ has developed a site for crime laboratories to indicate their interest in participating in research. Interested laboratories are encouraged to visit https://nij.ojp.gov/funding/research-and-evaluation-publicly-funded-forensic-laboratories to provide their contact information.

Researchers who have developed methods and/or technologies that are ready for evaluation in forensic laboratory practice, including previous and current NIJ research grantees, are strongly encouraged to apply to NIJ's <u>Research</u> and <u>Evaluation in Publicly Funded Forensic Laboratories</u> program.

Information on NIJ's forensic science research and development programs (including previously funded projects) can be found at https://nij.ojp.gov/topics/forensics.

Page 7 of 20 O-NIJ-2022-171433 The Goals, Objectives, and Deliverables are directly related to the performance measures that show the completed work's results, as discussed in the Content of Application Submission section.

Evidence-Based Programs or Practices

OJP strongly encourages the use of data and evidence in policymaking and program development for criminal justice, juvenile justice, and crime victim services. For additional information and resources on evidence-based programs or practices, see the OJP Grant Application Resource Guide.

Information Regarding Potential Evaluation of Programs and Activities

OJP may conduct or support an evaluation of the programs and activities funded under this solicitation. For additional information, see the <u>OJP Grant Application Resource Guide</u> section entitled "Information Regarding Potential Evaluation of Programs and Activities."

Federal Award Information

General Guidance for Federal Award

Total number of awards NIJ expects to make: one (1) per invitation Maximum dollar amount for each award: please refer to invitation letter Total amount to be awarded under solicitation: please refer to invitation letter Period of performance start date: please refer to invitation letter Period of performance duration: please refer to invitation letter

Solicitation Categories

This solicitation does not include Solicitation Categories.

Awards, Amounts and Durations

Anticipated Total Amount to be Awarded Under Solicitation

\$1,140,601.00

Types of Awards

NIJ expects to make awards under this solicitation as grants. See the "Administrative, National Policy, and Other Legal Requirements" section of the <u>OJP Grant Application Resource Guide</u> for a brief discussion of important statutes, regulations, and award conditions that apply to many (or in some cases, all) OJP grants.

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 the <u>OJP Grant Application Resource Guide</u> for additional information.

Budget Information

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 2022, 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.)

Cost Sharing or Matching Requirement

Page 8 of 20 O-NIJ-2022-171433 This solicitation does not require a match.

Pre-agreement Costs (also known as Pre-award Costs)

See the <u>OJP Grant Application Resource Guide</u> for information on Pre-agreement Costs (also known as Pre-award Costs).

Limitation on Use of Award Funds for Employee Compensation: Waiver

With respect to any award of more than \$250,000 made under a solicitation, a recipient may not use federal funds to pay total cash compensation (salary plus cash bonuses) to any employee of the recipient at a rate that 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.[2] The 2022 salary table for SES employees is available on the Office of Personnel Management website.

The Director of the National Institute of Justice may exercise discretion to waive, on an individual basis, this limitation on compensation rates allowable under an award. An applicant that requests a waiver should include a detailed justification in the budget narrative of its application. An applicant that does not submit a waiver request and justification with its application should anticipate that OJP will require the applicant to adjust and resubmit the budget.

The justification should address, in the context of the work the individual would do under the award, the particular qualifications and expertise of the individual, the uniqueness of a service the individual will provide, the individual's specific knowledge of the proposed program or project, and a statement that explains whether and how the individual's salary under the award would be commensurate with the regular and customary rate for an individual with his/her qualifications and expertise, and for the work he/she would do under the award.

See the DOJ Financial Guide for more information on Employee Compensation.

Prior Approval, Planning, and Reporting of Conference/Meeting/Training Costs

See the OJP Grant Application Resource Guide for information on Prior Approval, Planning, and Reporting of Conference/Meeting/Training Costs.

Costs Associated with Language Assistance (if applicable)

See the OJP Grant Application Resource Guide for information on Costs Associated with Language Assistance.

Eligibility Information

For eligibility information, see the solicitation cover page.

For information on cost sharing or matching requirements, see the Federal Award Information section.

Application and Submission Information

The following application elements **must** be included in the application to meet the basic minimum requirements to advance to peer review and receive consideration for funding:

- Proposal Narrative
- Budget WorkSheet and Budget Narrative (Attachment)
- Curriculum Vitae/Resumes/Biosketches for new Senior/Key Personnel. (For purposes of this solicitation, "senior/key personnel" mean the principal investigator, any and all co-principal investigators, and other significant contributors.)

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

Information to Complete the Application for Federal Assistance (SF-424)

The SF-424 must be submitted in Grants.gov. It is a required standard form used as a cover sheet for submission of pre-applications, applications, and related information. See the <u>OJP Grant Application Resource Guide</u> for additional information on completing the SF-424.

In Section 8F of the SF-424, please include the name and contact information of the individual **who will complete the application in JustGrants**. JustGrants will use this information *(email address)* to assign the application to this user in JustGrants.

Intergovernmental Review: This solicitation ("funding opportunity") **is not** subject to <u>Executive Order 12372</u>. 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."

Standard Applicant Information (JustGrants 424 and General Agency Information)

The Standard Applicant Information section of the JustGrants application is pre-populated with the SF-424 data submitted in Grants.gov. The applicant will need to review the Standard Applicant Information in JustGrants and make edits as needed. Within this section, the applicant will need to add: zip codes for areas affected by the project; confirm its Authorized Representative; and verify and confirm the organization's unique entity identifier, legal name, and address.

Proposal Abstract

A proposal abstract (no more than 400 words) summarizing the proposed project, including the purpose of the project, primary activities, expected outcomes, the service area, intended beneficiaries and subrecipients (if known), will be completed in the JustGrants web-based form. This abstract should be written in the third person and will be made publicly available on the OJP website if the project is awarded.

Proposal Narrative

The proposal narrative should be submitted as an attachment in JustGrants. The attached document should not exceed 18 pages. Pages should be numbered. If the proposal narrative fails to comply with these length restrictions, PO may consider such noncompliance in final award decision.

The following sections must be included as part of the proposal narrative:

a. Statement of the Problem

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. It is not uncommon for multiple problems to exist simultaneously (for example, there may be a criminal justice problem affecting public safety, a current technical challenge/need identified by forensic practitioners, as well as a scientific/technology gap between the current state of the art and a desired solution) and applicants should discuss each of these clearly and justify the importance of the separate issues. As part of this discussion, applicants should present a review of previous literature and discuss previous research related to these problems.

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

The Statement of the Problem section should do the following:

- Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.
- Explain the criminal justice significance of the problem.
- Describe the scientific premise for the proposed project, including consideration of the strengths and weaknesses of published research or preliminary data crucial to the support of your application.
- Describe the current state of the art and technologies, both in practice and in past/current research, directed at the described problem. If this request is a direct follow-up of an earlier study, describe those results.
- Explain how the proposed project will improve scientific knowledge, technical capability, and/or forensic practice. Describe how concepts, methods, technologies, or services that drive the forensic science field will be changed if the proposed aims are achieved.

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- Include a review of relevant literature.
- b. Project Design and Implementation

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 in the solicitation. Applicants should describe the research methodology and analysis plan 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.

The <u>Project Design and Implementation</u> section should include the following:

- 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 the data archiving plan (see Data Archiving Plan under Appendices).
- Human subjects/study population: If the project will involve human subjects, clearly describe the study
 population. Include detailed information about how subjects were or will be identified and sampled and the
 method(s) of characterization. For case-control studies, provide inclusion and exclusion criteria and any
 matching done between cases and controls. Describe relevant environmental factors and how they were
 measured. If the subjects provided for this study are a subset of a family population, explain which
 individuals were included and how they were selected. Highlight special features of the study population
 that would enhance success.
- Sample information: In table form, provide: sample description such as case/control status and/or collection site; number of samples included in the study; subsample source (e.g., tissue source of the DNA). If data from other subjects will be included in the analysis, add row(s) to describe those samples.

Sample Set	Target # of	Source	Service	Previous Service
	Samples			
Known controls	500	Buccal	Targeted sequencing	STR base genotyping
Forensic samples	500	Buccal	Targeted sequencing	STR base genotyping

Three examples are provided below:

Sample Set	Target # of Samples	Source	Subsample Set	Service
Crania	300	Modern Donated Collection	300 individuals of known Hispanic Ancestry; 150 Male, 150 Female	Morphometric sex Estimation
Pelvis	300	Modern Donated Collection	300 individuals of known Hispanic Ancestry; 150 Male, 150 Female	Morphometric sex Estimation
Subject Desci	ription		Target # of Samples	Collection Site

Subject Description	Target # of Samples	Collection Site
Patients at drug rehab facilities	100	Scalp, cut (not plucked)
Controls – subjects donating hair for wigs	100	Scalp, cut (not plucked)

Provide supporting text that justifies the choice of samples. Describe other relevant information (e.g., the extraction methods used for each DNA source and the approximate DNA concentrations). Describe previous analyses done on these subjects.

- 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; 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.
- Describe the role of each team member in the analysis process, and summarize the team's experience with the approaches proposed.
- Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.
- If the project is in the early stages of development, describe any strategy to establish feasibility, and address the management of any high-risk aspects of the proposed work.
- Explain how relevant variables are factored into research designs and analyses.
- Data management: Describe the institutional computing resources available for this study, the type of database that will be used (if applicable), and how the data will be managed. Highlight the team's experience with management of data sets (especially those similar to the proposed project). Also describe strategies for data sustainability beyond the proposed funded work.
- Preliminary Data/Results: For new lines of research, include preliminary results, if available. Discuss the Pl's preliminary studies, data, and or experience pertinent to this application. Preliminary data can be an essential part of a research grant application, and help to establish the likelihood of success of the proposed project. New Investigators should include preliminary data.
- c. Capabilities and Competencies

This section should describe the experience and capabilities 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. Applicants should address:

- Experience and capacity to work with the proposed data sources in the conduct of similar research efforts.
- 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.

The Capabilities/Competencies section should include the following:

 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 Page 12 of 20 O-NIJ-2022-171433 location and pertinent capabilities.

- Senior/Key personnel profile: Describe each senior/key personnel'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.
 - The remaining senior/key personnel profiles should be listed in alphabetical order. Although 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 role should be included if they meet the definition of senior/key personnel.
 - 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 OSCs. Consultants should be included if they meet the OSC definition. OSCs should be listed after all senior/key persons.
- d. Plan for Collecting the Data Required for this Solicitation's Performance Measures

Note: Applicants are **not** required to submit performance data with the application. Rather, performance measure information is included as an alert that each successful applicant will be required to submit performance data as part of each award's reporting requirements.

OJP will require each successful applicant to submit regular performance data that demonstrate the results of the work carried out under the award. The performance data directly relate to the goals, objectives, and deliverables identified in the "Goals, Objectives, and Deliverables" discussion. The applicant can also visit OJP's performance measurement page at www.ojp.gov/performance for an overview of performance measurement activities at OJP.

A list of performance measure questions for this program can be found at page 17.

NIJ will require award recipients to submit performance measure data, quarterly financial reports, semi-annual performance reports, and the Final Technical Summary in JustGrants. Further guidance on the post-award submission process, if selected for award.

Goals, Objectives, Deliverables, and Timeline

Applicants will submit the project's goals, objectives, deliverables and timelines in the JustGrants Web-based form.

Budget and Associated Documentation

Budget Worksheet and Budget Narrative (attachment)

Applicants will complete the budget attachment and submit it by uploading it as an attachment in JustGrants. See the OJP Grant Application Resource Guide for additional information.

Indirect Cost Rate Agreement (if applicable)

The applicant will submit its indirect cost rate agreement by uploading it as an attachment in JustGrants. See the <u>OJP</u> <u>Grant Application Resource Guide</u> for additional information.

Financial Management Questionnaire (including applicant disclosure of high-risk status)

The applicant will download the questionnaire, complete it, and submit it by uploading it as an attachment in

Page 13 of 20 O-NIJ-2022-171433 JustGrants. See the OJP Grant Application Resource Guide for additional information and the link to the questionnaire.

Disclosure of Process Related to Executive Compensation

If applicable, the applicant will submit a description of the process used to determine executive compensation by uploading the document as an attachment in JustGrants. See the "Application Attachments" section of the <u>OJP Grant</u> <u>Application Resource Guide</u> for information.

Additional Application Components

The applicant will attach the requested documentation in JustGrants.

Research and Evaluation Independence and Integrity Statement

If an application proposes research (including research and development) and/or evaluation, the applicant must demonstrate research/evaluation independence and integrity, including appropriate safeguards, before it may receive award funds. The applicant will submit documentation of its research and evaluation independence and integrity by uploading it as an attachment in JustGrants. For additional information, see the <u>OJP Grant Application Resource</u> <u>Guide</u>.

Human Subjects Protection

Human Subjects Protection paperwork as a separate attachment (documentation and forms related to Institutional Review Board [IRB] review). See https://nij.ojp.gov/funding/human-subjects-protection. Note: Final IRB approval is not required at the time an application is submitted.

Privacy Certificate

Privacy Certificate (for further guidance go to <u>https://nij.ojp.gov/funding/confidentiality-and-privacy-protections</u> and <u>https://nij.ojp.gov/funding/model-privacy-certificate</u>.

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 archived in accordance with the submitted plan as approved by NIJ. At a minimum, this plan should include submission of study-level information to the National Archive of Criminal Justice Data (NACJD) that links to a publicly available data posting location.

Applications should include a brief plan as a separate attachment — labeled "Data Archiving Plan" — to comply with data archiving requirements. The plan should provide details about proposed data management and archiving for all files and documentation necessary for others to reproduce the project's findings. Pertinent files and documentation may 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.

Disclosures and Assurances

The applicant will address the following disclosures and assurances.

Disclosure of Lobbying Activities

Complete and submit the SF-LLL in Grants.gov. See the OJP Grant Application Resource Guide for additional information.

DOJ Certified Standard Assurances

Review and accept the DOJ Certified Standard Assurances in JustGrants. See the <u>OJP Grant Application Resource</u> <u>Guide</u> for additional information.

Applicant Disclosure of Duplication in Cost Items

Page 14 of 20 O-NIJ-2022-171433 Complete the JustGrants web-based Applicant Disclosure of Duplication in Cost Items form. See the <u>OJP Grant Application</u> <u>Resource Guide</u> for additional information.

DOJ Certifications Regarding Lobbying; Debarment, Suspension and Other Responsibility Matters; and Drug-Free Workplace Requirements

Review and accept the DOJ Certified Certifications Regarding Lobbying; Debarment, Suspension and Other Responsibility Matters; Drug-Free Workplace Requirements; and Law Enforcement and Community Policing in JustGrants. See the OJP Grant Application Resource Guide for additional information.

Applicant Disclosure and Justification - DOJ High Risk Grantees (if applicable)

If applicable, submit the DOJ High Risk Disclosure and Justification as an attachment in JustGrants. A DOJ High Risk Grantee is an award 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. See the OJP Grant Application Resource Guide for additional information.

How to Apply

Step 1: The applicant must submit the **SF-424** and an **SF-LLL** in Grants.gov at https://www.grants.gov/web/grants/register.html.

Step 2: The applicant must then submit the **full application**, including attachments, in JustGrants at <u>JustGrants.usdoj.gov</u>.

For additional information, see the "How to Apply" section in the <u>OJP Grant Application Resource Guide</u> and the <u>DOJ</u> <u>Application Submission Checklist.</u>

Submission Dates and Time

The SF-424 and the SF-LLL must be submitted in Grants.gov by 11:59 p.m. eastern time on September 6, 2022.

The full application must be submitted in JustGrants by 8:59 p.m. eastern time on September 7, 2022.

OJP urges applicants to submit their Grants.gov and JustGrants submissions prior to the due dates to allow sufficient time to correct errors and resubmit by the submission deadlines if a rejection notification is received. To be considered timely, the full application must be submitted in JustGrants by the JustGrants application deadline.

Experiencing Unforeseen Technical Issues

An applicant that experiences unforeseen SAM.gov, Grants.gov, or JustGrants technical issues beyond its control that prevent application submission by the deadline, must demonstrate all efforts in requesting technical support in order to submit an application by the deadline. Technical support is available via phone and email to the applicable SAM.gov, Grants.gov, or JustGrants support centers or service desks in which an applicant received a ticket number for resolution. If an applicant misses a deadline due to unforeseen technical difficulties, the applicant may request a waiver to submit an application after the deadline. *Note: If an applicant does not submit all the required Grants.gov forms by the Grants.gov deadline, the applicant will not be able to proceed to the JustGrants portion of the application process.*

An applicant experiencing technical difficulties with the following systems must contact the associated support desk indicated below to report the technical issue and receive a tracking number:

- Grants.gov contact the Grants.gov Customer Support Hotline
- SAM.gov contact the <u>SAM Help Desk (Federal Service Desk)</u>
- JustGrants contact the JustGrants Support Desk at JustGrants.Support@usdoj.gov or 833-872-5175

An applicant requesting a waiver to submit a late application must document their request for technical assistance in Page 15 of 20 O-NIJ-2022-171433 an email to the OJP Response Center at <u>grants@ncjrs.gov</u> within 24 hours after the application deadline to request approval to submit its application after the deadline. If an applicant has technical issues with Grants.gov, the applicant must NCJRS within 24 hours of the Grants.gov deadline to request approval to submit after the deadline. Waiver requests to submit after the submission deadline must:

- Describe the technical difficulties experienced;
- Include a timeline of the applicant's submission efforts (e.g., what date and time did the error occur, what date and time was action taken to resolve the issue and resubmit; and what date and time did support representatives respond)
- Include an attachment(s) of the complete grant application and all required documentation and material; and
- Include the applicant's Unique Entity Identifier (UEI) and any applicable SAM.gov tracking number(s), Grants.gov Help Desk, and JustGrants Support Desk Ticket Numbers.

OJP will review each request for late submission and required supporting documentation and notify the applicant whether the request has been approved or denied. For more details on the waiver process, OJP encourages applicants to review the "Experiencing Unforeseen Technical Issues" section in the <u>OJP Grant Application Resource</u> Guide.

Application Review Information

Review Process

OJP reviews each application to make sure that the information presented is reasonable, understandable, measurable, and achievable, as well as consistent with the solicitation. For invited applications, OJP reviews for consistency with the invitation letter and invited applicant guidance. See the <u>OJP Grant Application Resource Guide</u> for information on the application review process.

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 such comments by the applicant, in addition to the other information in FAPIIS, in its assessment of the risk posed by the applicant.

Final award decisions for research and statistics programs will be made by the Director of the National Institute of Justice. For purposes of this Guidance for Invited Applications, this "[final] award decisions" provision expressly modifies the "final award decisions" provision in the "Application Review Information" section of the <u>OJP Grant</u> <u>Application Resource Guide</u>.

Federal Award Administration Information

Federal Award Notices

See the OJP Grant Application Resource Guide for information on award notifications and instructions.

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 the 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 <u>OJP Grant Application Resource Guide</u>.

Information Technology (IT) Security Clauses

An application in response to this solicitation may require inclusion of information related to information technology security. See the <u>OJP Grant Application Resource Guide</u> for information on information technology security.

General Information about Post-Federal Award Reporting Requirements

In addition to the deliverables described in the "Program Description" section, all award recipients under this solicitation will be required to submit certain reports and data.

<u>Required reports</u>. Award recipients typically must submit quarterly financial reports, *semi-annual* performance reports, final financial and performance reports, final technical summary and, if applicable, an annual audit report in accordance with the Part 200 Uniform Requirements or specific award conditions. Future awards and fund drawdowns may be withheld if reports are delinquent. (In appropriate cases, OJP may require additional reports.)

See the <u>OJP Grant Application Resource Guide</u> for additional information on specific post-award reporting requirements, including performance measure data.

Federal Awarding Agency Contact(s)

For OJP contact(s), see the solicitation cover page.

For contact information for Grants.gov and JustGrants, see the solicitation cover page.

Other Information

Freedom of Information and Privacy Act (5 U.S.C. 552 and 5 U.S.C. 552a)

See the <u>OJP Grant Application Resource Guide</u> for information on the Freedom of Information and Privacy Act (5 U.S.C. 552 and 5 U.S.C. 552a).

Provide Feedback to OJP

See the OJP Grant Application Resource Guide for information on how to provide feedback to OJP.

Performance Measures

Performance Measures Objective	Performance Measure(s)	Description	Data Recipient Provides
Conduct research in science, technology, engineering, and/or mathematics having clear implications for criminal or juvenile justice policy and practice in the United States.	 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. 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. 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. Number of technologies fielded as a result (in whole or in part) of work funded under the NIJ award. 	A technology is defined as a tool to include, for example, test methods, software, hardware, etc. A fielded technology is one that remains in use at the conclusion of the grant or agreement.	 Quarterly financial reports, semi-annual and final performance reports, and products of the work performed under the NIJ award (including, at minimum, a final technical summary). If applicable, an annual audit report. List of citation(s) to all scholarly products that resulted in whole or in part from work funded under the NIJ award. If applicable, each data set that resulted in whole or in part from work funded under the NIJ award. Description of all technologies fielded as a result (in whole or in part) of work funded under the NIJ award.

Application Checklist

NIJ FY 2022 Invited to Apply - Funding to Support the Research and Development in Forensic Science for **Criminal Justice Purposes Program**

This application checklist has been created as an aid in developing an application. The DOJ Application Submission Checklist is another resource.

What an Applicant Must Do:

Prior to registering in Grants.gov

 Confirm your Entity's System Award Management (SAM) Registration Information (see OJP Grant Application Resource Guide)

To register in Grants.gov:

- Acquire an Authorized Organization Representative (AOR) and Grants.gov username and password (see OJP Grant Application Resource Guide)
- Acquire AOR confirmation from the E-Business Point of Contact (see OJP Grant Application Resource) Guide)

To find the Funding Opportunity:

- Search for the Funding Opportunity in Grants.gov using the opportunity number. Assistance Listing or keyword(s)
- Access the Funding Opportunity and Application Package (see step 7 in the OJP Grant Application) **Resource Guide**)
- Sign up for Grants.gov email notifications (optional) (see <u>OJP Grant Application Resource Guide</u>)
 Read <u>Important Notice: Applying for Grants in Grants.gov</u>
 Read OJP policy and guidance on conference approval, planning, and reporting available at
- https://www.ojp.gov/funding/financialguidedoj/iii-postaward-requirements#6g3y8 (see OJP Grant Application Resource Guide)

Overview of Post-Award Legal Requirements: Review the "Overview of Legal Requirements Generally Applicable to OJP Grants and Cooperative Agreements - FY 2022 Awards" in the OJP Funding Resource Center.

Review Scope Requirement:

- The federal amount requested is within the allowable limit(s): please see invitation letter
- Total amount to be awarded under solicitation: please see invitation letter

Review Eligibility Requirement: See cover page.

Prepare to submit the Application for Federal Assistance standard form (SF)-424 and Disclosure of Lobbying Activities form (SF-LLL)

- Review Information to complete the Application for Federal Assistance (SF-424) in Grants.gov
- Complete Standard Applicant Information (SF-424 information from Grants.gov)
- Submit the SF-424 and SF-LLL in Grants.gov

After the SF-424 and SF-LLL submission in Grants.gov, receive Grants.gov email notifications that:

- Submission has been received in Grants.gov
- Submission has either been successfully validated or rejected with errors (see OJP Grant Application Resource Guide)

If no Grants.gov receipt validation, or if error notifications are received:

 Contact NIJ or the Grants.gov Customer Support Hotline at 800-518-4726, 606-545-5035, at Grants.gov customer support, or support@grants.gov regarding technical difficulties (see OJP Grant Application Resource Guide)

Receive email notification to complete application in JustGrants

· Proceed to complete Application in JustGrants

Content of Application Submission

- Proposal Narrative
- Budget Worksheet and Budget Narrative (attachment)

Budget and Associated Documentation

- Budget Worksheet and Budget Narrative (attachment)
- Indirect Cost Rate Agreement (if applicable) (see <u>OJP Grant Application Resource Guide</u>)
 Financial Management and System of Internal Controls Questionnaire (see <u>OJP Grant Application</u>) Resource Guide)
- Disclosure of Process related to Executive Compensation (see OJP Grant Application Resource Guide

Additional Application Components

- Tribal Authorizing Resolution (if applicable) (see OJP Grant Application Resource Guide)
- Research and Evaluation Independence and Integrity (see OJP Grant Application Resource Guide)
- Request and Justification for Employee Compensation; Waiver (if applicable) (see OJP Grant Application **Resource Guide**)

Disclosures and Assurances

- Disclosure of Lobbying Activities (SF-LLL) (see OJP Grant Application Resource Guide)
- Applicant Disclosure of Duplication in Cost Items (see OJP Grant Application Resource Guide)
- DOJ Certified Standard Assurances (see OJP Grant Application Resource Guide)
- DOJ Certifications Regarding Lobbying; Debarment, Suspension and Other Responsibility Matters; and Drug-Free Workplace Requirements (see <u>OJP Grant Application Resource Guide</u>)
- Applicant Disclosure and Justification DOJ High Risk Grantees (if applicable) (see OJP Grant Application Resource Guide)

Submit application in JustGrants:

Application has been successfully submitted in JustGrants

If no JustGrants application submission validation or if error notifications are received:

Contact JustGrants.Support@usdoj.gov or 833–872–5175 regarding technical difficulties.

Endnotes

[1] If database development is proposed, subsequent NIJ awardees are encouraged to share such information with the National Institute of Standards and Technology's forensic catalog of databases at https://www.nist.gov/oles/forensic-database.

[2] OJP does not apply this limitation on the use of award funds to the nonprofit organizations listed in Appendix VIII to 2 C.F.R. Part 200.