



National Institute of Justice

S o l i c i t a t i o n

Sarah V. Hart, Director

May 2002

No Suspect Casework DNA Backlog Reduction Program (FY2003)

APPLICATION DEADLINE:

September 13, 2002

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

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For grant and funding information, contact:
Department of Justice Response Center
800-421-6770

Office of Justice Programs
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National Institute of Justice
World Wide Web Site:
<http://www.ojp.usdoj.gov/nij>

TABLE OF CONTENTS

| | | |
|-------|---|----|
| I. | Introduction | 1 |
| II. | Background | 1 |
| III. | Solicitation Objectives | 2 |
| IV. | Project Requirements | 3 |
| V. | Uses of Funding | 5 |
| VI. | Evaluation of Submitted Proposals | 5 |
| VII. | Performance Measures | 6 |
| VIII. | How to Apply | 7 |
| IX. | Award Information | 10 |
| X. | Contact Information | 10 |

Appendices

| | |
|------------------|--|
| Appendix A | <i>NDIS Standards for Acceptance of DNA Data</i> |
| Appendix B | No Suspect Cases Worksheet |
| Appendix C | Laboratory Participation Report |
| Appendix D | Example Table of Contents for Proposals |
| Appendix E | Statutory Assurance Form |

No Suspect Casework DNA Backlog Reduction Program (FY2003)

I. Introduction

This solicitation offers an opportunity for States to apply for funding for identification, processing and analysis of no suspect cases, either by their own public laboratories or by qualified fee-for-service vendors (see 'Outsourcing' below).

The goal of this solicitation is to obtain proposals from States ("Applicant") that describe their plan to:

- A. **Identify and test no suspect cases.**
- B. **Effectively use DNA databases to solve no suspect crimes having DNA evidence.**

Approximately \$25 million will be available for identification, processing, and DNA analysis of no suspect casework in FY 2003. Analyses may be conducted "in-house" and/or by outsourcing the testing of cases/samples to State or local laboratories outside of the applicant's State, or to qualified private vendor laboratories.

The following definitions are used for the purposes of this solicitation:

No Suspect Casework - cases where law enforcement has not developed a suspect, or cases in which a suspect has been eliminated through testing or other investigative means.

In-house - any portion of processing and/or DNA analysis of cases/samples that occurs within the applicant's State by a State or local agency.

Outsourcing - any processing and/or DNA analysis that takes place by an accredited or certified State or local laboratory outside of the applicant's State as a contractual agreement between the applicant and the other public laboratory, or by a certified or accredited private vendor laboratory. (Please note: accreditation refers to a current ASCLD-LAB

accreditation and certification refers to a current NFSTC certification for Forensic DNA Testing.)

DNA analysis - the generation of a DNA profile in accordance with the *NDIS Standards for Acceptance of DNA Data* (Appendix A) using the 13 CODIS core STR loci - FGA, vWA, D3S1358, CSF1PO, TPOX, THO1, D18S51, D21S11, D8S1179, D7S820, D13S317, D5S818, and D16S539.

It is required that **all** samples associated with this program will be processed and/or analyzed according to established procedures and protocols following the Quality Assurance Standards for Forensic DNA Testing Laboratories (<http://www.fbi.gov/hq/lab/codis/forensic.htm>) set by the Director of the Federal Bureau of Investigation (FBI).

II. Background

DNA analysis used in conjunction with the Combined DNA Index System (CODIS) is a powerful investigative tool beginning at the crime scene with the collection of evidence and ending with a judicial conclusion. For CODIS to be truly effective and DNA to reach its full potential as evidence, DNA databases must be populated with profiles from both offenders and from crime scene evidence.

DNA is especially useful in cases where no suspect is known. DNA profiles obtained from these cases can be compared to local, State, and national DNA databases through CODIS for a match between the evidence and a convicted felon. There are many types of unprocessed forensic cases that potentially contain DNA but lack a suspect. All of these unprocessed no suspect cases are currently being stored at various locations, by various law enforcement or criminal justice agencies throughout the United States. By testing these cases, crimes may be solved.

III. Solicitation Objectives

The following objectives are important in meeting the goals of this solicitation and to receive funding:

A. For Applicants to demonstrate an effective plan implementing the use of DNA evidence to process no suspect casework and solve crimes.

Applicants **are** required to develop and present a plan for the prioritization of cases. NIJ recognizes that it is possible that different laboratories within a State will find it effective to employ different prioritization schemes based on the particulars of each jurisdiction. Applicants are encouraged to be creative in the mechanisms they use to identify and prioritize cases. The following points are provided to stimulate applicants to think about all aspects when creating their prioritization plans.

Each of the points raised are for consideration but **are not** requirements for a successful proposal.

1. Select cases that provide probative data based on the circumstances of the case—DNA evidence, if identified, has the potential to lead to the identification of the perpetrator of the crime.
2. Select cases that are likely to provide biological evidence for DNA analysis—for example, a vaginal swab from a rape kit collected more than 48-72 hours after the crime, subject to the activity of the victim, may yield a lower quantity of DNA as compared to a sample collected earlier or a stain on clothing.
3. Select cases where standards from known individuals can be obtained for elimination purposes—In a mixed sample, the profile of the perpetrator is more difficult to determine if the profiles of known contributors cannot be eliminated.
4. Prioritize cases such that if a CODIS hit is made the case can continue toward judicial conclusion. For example—

- S The suspect cannot be charged with the crime if it exceeds the statute of limitations. Applicants must justify testing cases where the statute of limitations has expired. This justification may include supporting documentation from the appropriate agency outlining the value of the test.
 - S If the victim is not willing or able to press charges against the perpetrator, testing evidence will not end with a judicial conclusion.
5. Applicants may wish to consider additional factors in their prioritization of cases that could effect the productivity of the program:
 - S Evidence yielding a single DNA profile is processed most easily.
 - S Careful case management can help to select the most probative evidence.
 - S Historically, there is a higher chance of a sample “hitting” against a local database than against the national DNA database. Therefore, priority should be given to samples that have never been searched (in any database) with an STR profile rather than to those that have, with a partial profile, been searched against a local database.

B. To foster cooperation and collaboration among all of the affected governmental agencies and departments (law enforcement, crime laboratories, courthouses, and prosecutors) within a State to maximize the use of CODIS for solving no suspect crimes. States with more than one DNA laboratory must demonstrate that all of the public DNA laboratories are given the opportunity to participate in the proposal process. It is also important that local DNA laboratories have equal access to Federal funds. The distribution of funds among the different agencies in the State to process cases should be based upon the criteria outlined in Section A of the Solicitation Objectives rather than jurisdictional considerations. All no suspect cases within the State should be considered for identification and processing according to the priorities identified in the proposal. It is especially important to demonstrate how these federal funds

and other resources will be distributed to the State and local laboratories as well as to the other members of the criminal justice system including, but not limited to, law enforcement and prosecutors for case evaluation.

C. To have States develop plans for in-house processing that will, in conjunction with reducing the backlog, enhance and strengthen the State’s infrastructure to continue processing no suspect cases for all State and local laboratories.

D. Provide for cost-effective DNA Testing. This includes, if applicable, verifying that vendor laboratories are charging for work that is actually completed. Full compensation cannot be given to the vendor laboratories if complete testing has not been performed for the State.

E. Ensure quality results in accordance with the most current Quality Assurance Standards for Forensic DNA Testing Laboratories issues by the FBI Director. Good laboratory techniques and adequate controls will facilitate the streamlining of the processing and analysis of the DNA profiles.

IV. Project Requirements

Applicants must submit ten copies of a single proposal that may include identification, processing and DNA analysis “in-house,” by outsourcing, or a combination of the two. Applicants must:

A. Be the State government agency having oversight of the State’s DNA database.

B. Have received approval for CODIS participation.

C. Ensure that only cases without a suspect are being analyzed. The State must strictly adhere to the definition of no suspect cases. While the strength of DNA to exonerate falsely accused is well recognized, directives for this program require that

only no suspect cases be tested. Appropriate communication between agencies is important to prevent inadvertent testing of cases where a suspect has been identified. If the Grantee processes a case previously adjudicated, NIJ must be notified and the Grantee must process a substitute case at their own expense. The application for program funds must identify planned remediation if cases with suspects are inadvertently tested. NIJ will not consider any request to permit retroactive testing of cases with suspects.

Required Proposal Elements

- Applicants must describe how they plan to meet Solicitation Objectives A-E outlined that section.
- Applicants must provide a budget narrative that specifically identifies each cost area in the processing of no suspect cases. Applicants are encouraged to apply for funding that will support the maximum volume of work that can be performed in the most cost effective manner. Applicants are expected to fulfill their commitment to processing the no suspect cases outlined in their proposal. The proposed budget should be reasonable and allow for the maximum cost benefit.
- Applicants must identify in detail the methods they will use to maintain accurate records about the cases selected for analysis in this program. Records identifying specific cases analyzed with Federal funds must be kept so that the data may be used to quantify the effectiveness and illustrate the impact of this program.
- There are a number of different approaches that can be taken in processing the cases/samples through laboratories. Applicants are encouraged to be creative in the approach they will use in order to maximize the use of funds under this program. The program narrative should describe how the approach to processing and

S o l i c i t a t i o n

- DNA analysis will be cost effective and meet the objectives of this solicitation.
- Because emphasis is placed on collaboration between State and local laboratories, as well as other criminal justice agencies, applicants are encouraged to develop approaches for sharing resources between agencies within a State where no formal mechanism exists for the transfer of funds. Applicants may propose to contract with local public laboratories within their State for processing cases/samples.
- Applicants should provide a plan for the identification and prioritization of cases, evidence testing and submission of profiles into CODIS. This plan should outline:
 - S How cases will be identified.
 - S How cases will be prioritized.
 - S Identification of testing laboratories.
 - S A policy for case/sample submission to the testing laboratory.
 - S The testing laboratory's case acceptance policy.
 - S A plan to monitor the disposition of cases/samples through the testing process and to track all CODIS hits.
 - S A plan for submission of evidence profiles into CODIS
- If applicable, the Applicants must describe in their program narrative how they will ensure that the outsourcing laboratory (or laboratories) they use will:
 - Be currently accredited by the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB) or have received a current Certificate of Accreditation from the National Forensic Science Technology Center (NFSTC) for compliance with Quality Assurance Standards for Forensic DNA Testing Laboratories as issued by the Director of the FBI.
 - Adhere to the most current Quality Assurance Standards for Forensic DNA Testing Laboratories issued by the FBI Director.
 - Run the proper quality assurance standards.
 - Have a Technical Leader that is located on site at the laboratory where the testing is being performed.
 - If applicable, have the technical ability to appropriately screen evidence to maximize analytical results.
 - Provide quality data that can be easily reviewed and uploaded into local, State or national DNA databases in accordance with the laws of the State.
 - *Only be paid for work that is actually performed.* For example, funds from this program cannot be used to pay laboratories for fully processing samples when certain steps such as amplification, analysis, or interpretation were not performed. Inadvertent financial incentive to produce no results from the evidence (e.g., insufficient DNA to process) should be avoided. The compensation given to the outsourcing laboratory should be fair, and directly reflect the effort and cost put forth by the laboratory in processing the case/sample.
- Unknown suspect casework resulting in CODIS acceptable data must be expeditiously uploaded.

V. Uses of Funding

Funds may be used for:

- Overtime and/or other compensation for existing staff (including law enforcement, prosecutorial staff, court staff, laboratory personnel or other individuals with whom the evidence resides) to process no suspect cases. This can include “in-house” training for the processing of the cases.
- Laboratory equipment and supplies needed for processing no suspect cases and building infrastructure for no suspect casework.
- Contractor-provided services (both in-house and outsourcing) to perform various steps in processing and/or analysis of cases/samples. Examples include: outsourcing the screening and/or DNA analysis of cases to other laboratories, hiring consultants to screen and/or perform DNA analysis within your laboratory, and hiring consultants to assist with the administrative requirements of the project.
- In-state travel to identify or collect cases/samples or shipping costs associated with the transfer of evidence between agencies within a State (e.g., from the local police to the State crime laboratory).
- Transfer (shipping or hand delivery, whichever is most cost effective) of evidence from the State to the outsourcing laboratory.
- Travel to outsourcing laboratories for review of procedures and practices prior to initial sample shipment and an additional unannounced inspection, as allowed by State procurement policies.

- Quality assurance measures that can include submission of “blind” samples to the testing laboratory, submission of duplicate cases/samples to an independent laboratory for confirmatory testing, or retesting samples in-house. The number of these quality assurance samples will not exceed 5% of the cases/samples submitted for outsourcing.
- In-state travel and support for education and training programs to help appropriate criminal justice agencies identify and prepare no suspect cases for shipment to the laboratory for DNA testing.

Funds are not available for:

- Construction.
- Out of State training and travel (other than that specifically requested by NIJ in order to meet with grantees or as outlined above).
- Replacement of funds already available to the States for processing no suspect cases (supplanting).
- Hiring new staff or salaries for existing staff beyond the overtime or other compensation, outlined above. **(Please note that contractors/consultants may be hired)**
- Overhead or administrative costs. The State must demonstrate that funds are spent on expenses directly associated with processing no suspect casework. Indirect and administrative costs are unallowable under this program.
- Testimony or other litigation costs.

VI. Evaluation of Submitted Proposals

All proposals will be reviewed by an evaluation panel selected for their operational expertise as well

S o l i c i t a t i o n

as their knowledge in the substantive areas covered by this solicitation. The evaluations will be based upon the following criteria:

A. Responsiveness to the goals of the solicitation:

- Reduce the number of unanalyzed no suspect cases.
- Effectively use local, State, and national DNA databases to solve no suspect crimes having DNA evidence.

B. Responsiveness to the objectives of the solicitation:

- Identification and prioritization of cases.
- Cooperation among agencies.
- Development of infrastructure.
- Cost effectiveness.
- Quality results.
- Well maintained records of cases analyzed.

C. Likelihood of Project Success:

- Soundness of methodology and approach.
- Innovation and creativity.
- Awareness of pitfalls.
- Qualifications and experience of personnel as related to proposed project.
- Demonstrated ability to manage proposed effort.
- Adequacy of proposed resources to perform effort.

D. Budget Considerations:

- Total cost relative to perceived benefit.

- Appropriate budgets and level of effort.
- Use of existing resources to conserve costs.
- Cost-effectiveness of program.

A peer panel will review and evaluate proposals according to the criteria outlined in this section of the solicitation. Each proposal will be assessed for the overall effectiveness of the State's specific prioritization scheme in reducing the number of no suspect cases while effectively using local, State and national DNA databases to solve no suspect crimes having DNA evidence in a cost-effective and creative manner. Keep in mind that two States may each propose plans that differ significantly in the extent of prioritization because of issues specific to their jurisdiction, yet both may be equally appropriate in addressing the goals of the solicitation.

In addition, the solicitation leaves the choice of how to pre-screen (or even whether to pre-screen) samples for biological material to the discretion of the applicant. One applicant may choose to conventionally pre-screen samples in-house; another may choose to outsource pre-screening; a third may process a particular piece of evidence without using traditional biochemical methods to pre-screen. Each of these proposals may appropriately allow States to reduce the number of no suspect cases and effectively solve no suspect crimes having DNA evidence in a cost effective and creative manner.

After peer-review consideration, Institute staff will make recommendations to NIJ's Director based on the results of the independent reviews. Final decisions are at the discretion of the NIJ Director.

VII. Performance Measures

To ensure compliance with the Government Performance and Results Act, Public Law 103-62, this solicitation notifies applicants that NIJ's performance under this solicitation is measured by the number of cases processed where there is no known suspect.

Award recipients will be required to collect and report data in support of this measure. Progress reports must contain information specifically detailing how the No Suspect Casework DNA Backlog Reduction FY 2003 funding contributed to the processing of no suspect casework.

VIII. How to Apply

Those interested in submitting proposals must complete the required application forms and submit related required documents. To obtain application forms (including a sample budget worksheet) and guidelines for submitting proposals (including requirements for proposal writers and requirements for grant recipients):

- Access the NIJ Web site at <http://www.ojp.usdoj.gov/nij/funding.htm>.
- Request hard copies by mail from the National Criminal Justice Reference Service at 800-851-3420 or from the Department of Justice Response Center at 800-421-6770 (in the Washington, D.C., area, at 202-307-1480).
- Request copies by fax. Call 800-851-3420 and select option 1, then option 1 again for NIJ. Code is 1023.

Applicants must include the following information/forms to qualify for consideration:

- Standard Form (SF) 424—application for Federal assistance
- Geographic Areas Affected Worksheet
- Assurances
- Certifications Regarding Lobbying, Debarment, Suspension, and Other Responsibility Matters; and Drug-Free Workplace Requirements (one form)

- Disclosure of Lobbying Activities
- Budget Detail Worksheet
- Budget Narrative
- Federal Funding Certification
- Negotiated indirect rate agreement (not applicable for this program)
- Names and affiliations of all key persons from applicant and subcontractor(s), advisors, consultants, and advisory board members. Include names of principal investigator, title, organizational affiliation (if any), department (if institution of higher education), address, phone, and fax
- Proposal Abstract
- Table of contents
- Program narrative or technical proposal
- Privacy certificate
- Form 310 (Protection of Human Subjects Assurance Identification/Certification/Declaration)
- Environmental Assessment (will be required after proposal reviews and does not need to be submitted with initial application.)
- References/letters of cooperation from organizations collaborating in the project
- Résumés
- Statutory Assurance Form
- Appendixes, if any (e.g., list of previous NIJ awards, their status, and products [in NIJ or other publications])

A. Instructions for Submitting a Complete Proposal.

PLEASE use the following instructions to submit a complete proposal.

Note: No other materials beyond the written proposal will be provided to the peer-review panels for consideration.

- **Do not send video or audio tapes, computer files or other, non-paper support materials.** Photographs, diagrams or other paper figures are accepted as part of your application.

S o l i c i t a t i o n

- **Do not use 3-ring binders.** Staples, rubber bands, binder-clips or paper-clips are acceptable.
- **Do not send your proposal by facsimile transmissions, it will not be accepted.**
- **Divide and order the proposal using the following seven sections outlined below.**

Section 1 (Cover)

- ‘ Standard Form (SF) 424 (Application for Federal Assistance).
This form should be on top of the proposal. NIJ cannot accept the application without a completed and signed SF424. Refer to the instructions that download with the grant application document for items 1-18. Below are the answers to specific items that should be used while filling out the SF424.

Item 1-Type of Submission: This money can not be used for construction or building purposes. Check the “Non-construction” box in the application section.

Item 5 - Applicant Information: Proposals should be submitted from the government agency having direct oversight of the State DNA database program.

Item 9 - Name of Federal Agency: Type in “National Institute of Justice.”

Item 10 - Catalog of Federal Domestic Assistance Number: The number is 16.564 The Title is “No Suspect Casework DNA Backlog Reduction Program (FY2003).”

Item 11 - Descriptive Title of Applicant’s Project: Type in “No Suspect Casework DNA Backlog Reduction Program (FY2003).”

Item 13 - Proposed Project Dates: Fill in the dates during which you anticipate the project will operate for this program. The project should

begin on March 1, 2003. Applicants may select a 1 or 2 year time frame for completion.

Section 2

- ‘ **Geographic Areas Affected Worksheet**

- ‘ **Assurances**

- ‘ **Certifications Regarding Lobbying, Debarment, Suspension, and Other Responsibility Matters; and Drug Free Workplace requirements (one form)**

- ‘ **Disclosure of Lobbying Activities**

Section 3

- ‘ **Budget Detail Worksheet OJP Form 7150/1**

The budget application should be presented clearly. Major budget categories such as Personnel, Fringe Benefits, Travel, Equipment, Supplies, Contracts, and Other should be identified separately.

- ‘ **Budget Narrative**

Applicants must provide a complete budget narrative for the project, including the purpose for each item or service.

- ‘ **Federal Funding Certification**

Please include a statement that Federal funding made available under this program will not be used to supplant State or local funds and have this signed by the head of the agency.

Section 4

- ‘ **Names and affiliations of all key persons from applicant and subcontractor(s), advisors, consultants, and advisory board members.** Please list the name of the principal investigator, title, organizational affiliation (if any), department (if institution of higher education), address, phone, fax and email. The principal investigator should be the State DNA database administrator or Laboratory Director.

' **Proposal Abstract**

The proposal abstract, when read separately from the rest of the application, is meant to serve as a succinct and accurate description of the proposed work. Applicants must concisely describe the goals and objectives, design, and methods for achieving the goals and objectives. Do not summarize past accomplishments or include proprietary/confidential information. Length is not to exceed 400 words. Use the following two headers:

Project Goals and Objectives:

Project Design:

Section 5

' **Table of Contents**

Should list the content of the Program Narrative using the following specific headings:

- A. Proposal Abstract
- B. Fulfillment of Solicitation Goals
- C. Proposed Project
 - 1. Overview
 - 2. Specific Steps in Project
 - a. Narrative
 - b. Flow chart
 - 3. Project Deliverables
 - a. Number of no suspect cases expected to be processed under this proposal
- D. Fulfillment of Solicitation Objectives and Requirements
 - 1. Plan for the Identification and Prioritization of Cases
 - 2. Cooperation and collaboration among State agencies.
 - a. Narrative
 - b. Laboratory participation report (**table provided in Appendix C**)
 - 3. Enhancement of State's infrastructure.
 - 4. Cost Effective DNA Testing.
 - 5. Quality Results.
 - 6. Identification and Monitoring of Outsourcing Laboratories (if applicable).

7. Program Narrative

The Program Narrative should describe the entire processing of no-suspect cases. It must not exceed 30 double-spaced pages, no matter the amount of funding requested.

Section 6

' **Privacy Certificate**

The Privacy certificate, as listed, is not required for this program. Simply include a document with a heading "Privacy Certificate" followed by the statement, "No research will be conducted as part of this project. All information obtained during this project will be governed by the DNA Identification Act of 1994."

' **Form 310 (Protection of Human Subjects Assurance Identification/Certification/Declaration)**

The human subjects form should be completed except #6 and #7, which may be left blank. The applicant should insert the following comment for #8 Comments, "No research will be conducted on human subjects as part of this project."

' **Environmental Assessment**

Not required to be submitted with this initial application. After the proposals are reviewed, applicants will be contacted and then required to submit an environmental assessment.

Section 7

' **If applicable, references/letters of cooperation from organizations collaborating on this project**

' **Résumés**

' **Statutory Assurance Form**

Provided in Appendix E.

' **Appendices, if any**

Submission Information

Due Date: The original plus 9 copies of fully executed responses **must be received** at the National Institute of Justice by the close of business on **September 13, 2002**. Extensions of this deadline will not be permitted.

Send the proposal to:

No Suspect Casework DNA Backlog Reduction Program (FY2003)
National Institute of Justice
Office of Science and Technology
810 Seventh Street N.W.
Washington, DC 20531*

*If shipping other than US Mail, (e.g. overnight courier) please use ZIP code 20001.

Further guidance and information. Applicants who wish to receive additional guidance and information may contact the U.S. Department of Justice Response Center at 800-421-6770. Center staff can provide assistance or refer applicants to an appropriate NIJ professional. Applicants may, for example, wish to discuss their prospective approaches to testing with the NIJ professional staff.

IX. Award Information

Award period.

It is anticipated that the program will begin on March 1, 2003 with a one year or two year award period.

Number of awards. NIJ anticipates supporting multiple grants under this solicitation.

Award amount. It is expected that approximately \$25 million will be available for identification, processing and DNA analysis of no suspect casework in FY 2003.

X. Contact Information

Applicants are encouraged to contact NIJ to discuss questions concerning this solicitation before submitting their proposals. Questions may be requested to be submitted in writing for documentation or clarity. For further information Applicants may contact Dr. Lisa Forman at the above address or by phone at (202) 307-6608 or by E-mail at *formanl@ojp.usdoj.gov*.

For more information on the National Institute of Justice, please contact:

National Criminal Justice Reference Service

Box 6000
Rockville, MD 20849-6000
800-851-3420
e-mail: *askncjrs@ncjrs.org*

You can view or obtain an electronic version of this document from the NCJRS web site (<http://www.ncjrs.org>) or the NIJ web site (<http://www.ojp.usdoj.gov/nij>).

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| <p>This document is not intended to create, does not create, and may not be relied upon to create any rights, substantive or procedural, enforceable at law by any party in any matter civil or criminal.</p> |
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Appendix A

NDIS Standards for Acceptance of DNA Data

National DNA Index System (NDIS)

NDIS STANDARDS FOR ACCEPTANCE OF DNA DATA

January 11, 2000

Send comments to Dr. Barry Brown, FBI Laboratory, GRB 3R, 935 Pennsylvania Avenue, Northwest,
Washington, D. C. 20535-0001, (202) 324-1337. FAX (202) 324-1276

NDIS STANDARDS FOR ACCEPTANCE OF DNA DATA

Purpose

The concept for utilizing DNA profiles for forensic analysis was proposed by the Technical Working Group for DNA Analysis (TWGDAM), as described by Kirby (1990)¹. The Federal Bureau of Investigation Laboratory initiated development of the Combined DNA Index System, (CODIS), which contains separate files or indexes of DNA profile information. The main files in use at the local and state level are forensic and convicted offender. The DNA profiles in CODIS are used for law enforcement purposes only, and access is limited to criminal justice agencies performing DNA analysis (DNA Identification Act of 1994. 42 U.S.C. §14132). CODIS facilitates comparisons of DNA records to generate investigative leads. CODIS also provides functionality for use in assessing the statistical significance of a forensic DNA match.

The National DNA Index System (NDIS) is intended to be a single central repository of DNA records. These DNA records will be locally generated by NDIS participating laboratories in the United States. The centralized repository of DNA records will be used to generate investigative leads. System-wide standards have been established thereby ensuring that only reliable and compatible DNA profiles are contained in the NDIS files.

This document provides the NDIS standards for acceptance of DNA profiles. This version governs DNA data generated by Restriction Fragment Length Polymorphism (RFLP) and for Polymerase Chain Reaction (PCR) based methods.

CHANGES IN THE NDIS STANDARDS FOR ACCEPTANCE OF DNA DATA

From time to time, changes to the NDIS STANDARDS FOR ACCEPTANCE OF DNA DATA (NDIS STANDARDS), may be issued. Changes to the NDIS STANDARDS are to be posted on the FBI Web page (fbi.gov). These changes shall be promptly instituted by NDIS participating laboratories upon notification of the changes. Any laboratory recommending a change to the NDIS STANDARDS shall contact the NDIS Custodian, in writing. This communication should include the name of a contact person and telephone number, as well as a description of the proposed change and the reasons supporting the need for such a change. After review of such request, the NDIS Custodian shall notify the NDIS participating laboratory of his/her determination.

NDIS shall accept a DNA profile after it is determined to be compliant with the NDIS STANDARDS in effect at the time the DNA profile was derived or compliant with the standards that are in place at the time the DNA profile is offered. For example, a "new" molecular weight size marker may be added to the list of acceptable molecular weight size markers. Any DNA profiles offered but previously rejected solely as a result of the use of the previously unrecognized molecular weight size marker shall be accepted after the NDIS STANDARDS are revised to include the "new" molecular weight size marker.

¹The Combined DNA Index System (CODIS): A Theoretical Model, Appendix II, from DNA Fingerprinting, An Introduction, Kirby, L. T., 1990, Stockton Press, New York.

Laboratory Procedures and Practices

All DNA profiles offered to NDIS by NDIS participating laboratories shall be produced in accordance with the Quality Assurance Standards, as required in the DNA Identification Act of 1994. The Quality Assurance Standards for Forensic DNA Testing Laboratories were approved by the Director of the FBI and became effective October 1, 1998. The Quality Assurance Standards for Convicted Offender DNA Databasing Laboratories, also approved by the Director of the FBI, became effective April 1, 1999. These Quality Assurance Standards supersede the quality assurance guide lines adopted by TWGDAM, entitled "Guidelines for a Quality Assurance Program for DNA Analysis²" (TWGDAM Guidelines).

Restriction Fragment Length Polymorphism Section

Protocol for RFLP

1. The laboratory shall demonstrate that it continues to use a protocol that produces NDIS-compatible DNA results by analysis of the K562 human DNA control (American Type Culture Center, [ATCC], registered cell line). The K562 human DNA control shall be run on every RFLP electrophoretic analytical gel that exhibits a DNA profile offered to NDIS. The protocol is acceptable as long as the K562 human DNA control measurements are routinely within NDIS tolerances.
2. The restriction enzyme shall be *Hae III*.
3. Only DNA profiles derived by applying DNA probes to loci listed on the "List of NDIS Accepted Loci" shall be accepted by NDIS.
4. Derivation of base pair values shall be obtained using computer software approved by the Federal Bureau of Investigation.

Changes to the RFLP Protocols

1. A laboratory that changes its protocol shall not use the modified protocol in the analysis of specimens that are intended for submission to NDIS until the laboratory demonstrates that the modified protocol produces NDIS-compatible results.
2. The use of a protocol that does not achieve K562 human DNA control measurements within NDIS established tolerances shall be discontinued.
3. At the request of NDIS, a laboratory shall demonstrate the reliability of data generated by the proposed protocol.

²Guidelines for a Quality Assurance Program for DNA RFLP Analysis, Crime Laboratory Digest, April-July 1989, Vol. 16 (2), pp. 40-59; Guidelines for a Quality Assurance Program for DNA Analysis, Crime Laboratory Digest, April 1991, Vol 18 (2), pp. 44-75; and Guidelines for a Quality Assurance Program for DNA Analysis, Crime Laboratory Digest, April 1995, Vol. 22 (2), pp. 21-43.

Molecular Weight Size Marker (MWSM)

1. An MWSM from the list of acceptable MWSMs shall be run on each gel that exhibits a DNA profile that is submitted to NDIS.
2. All MWSMs, specimens and K562 human DNA control(s) shall be of sufficient clarity and intensity within the relevant measurement area of the gel so that meaningful measurements can be made.
3. No more than five (5) lanes shall be between any two MWSMs.
4. The MWSM lanes shall contain only MWSM.
5. The addition of a "new MWSM" to the list of acceptable MWSMs shall be made by NDIS only after data presented to NDIS demonstrates that the "new MWSM" shall generate NDIS-compatible results.

K562 Human DNA Control

1. The K562 human DNA control shall be on each analytical electrophoretic gel that exhibits a DNA profile submitted to NDIS.
2. Each NDIS subscribing laboratory shall request approval, in writing, from the NDIS Custodian, for established K562 human DNA control tolerances to be used by the NDIS subscribing laboratory. Once approved by the NDIS Custodian, such K562 human DNA control tolerances shall be accepted by NDIS.
3. K562 human DNA control measurements submitted to NDIS shall be within each subscribing laboratory's approved K562 human DNA control tolerances. K562 human DNA control measurements outside acceptable tolerances shall result in the rejection of all associated DNA profiles submitted from that analytical electrophoretic gel, at that locus.
4. Any NDIS subscribing laboratories seeking to change established tolerances shall request of the NDIS Custodian, in writing, approval of the new tolerances for associated DNA profiles to be accepted by NDIS, and the reason(s) for seeking to change established tolerances.
5. Any human DNA controls other than K562 included in a DNA analysis shall not be evaluated by NDIS (except as may be described elsewhere in this document). All sized K562 human DNA control measurements shall be evaluated before DNA results from any specimens are accepted by NDIS (for either use or inclusion in NDIS files).

6. As per Table 1, the NDIS Custodian shall calculate and record K562 human DNA controls for quality assurance as defined according to the following function:

$$\frac{\left(\frac{X\&\bar{X}}{SD_x}\right)^2 + \left(\frac{Y\&\bar{Y}}{SD_y}\right)^2 + 2R\left(\frac{X\&\bar{X}}{SD_x}\right)\left(\frac{Y\&\bar{Y}}{SD_y}\right)}{(1\&R^2)} \# K_{1\&a}$$

where: X, Y

Measured band

size of alleles 1 and 2.

\bar{X} , \bar{Y}

Expected interlaboratory band size of alleles 1 and 2

SD_x , SD_y

Expected interlaboratory reproducibility SD of alleles 1 and 2

R

Expected intralaboratory correlation between allele 1 and 2 measurements

K_{1-a}

Constant for coverage of 100(1-a)% of a bivariate normal distribution

| Table 1 | | | | | | |
|---------|-------------------|----------|-------------------|----------|-------|--------------|
| Locus | \bar{X} | SD_x^c | \bar{Y} | SD_y^c | R^d | $K_{0.99}^e$ |
| D1S7 | 4571 ^a | 34 | 4231 ^a | 31 | 0.62 | 9.21 |
| D2S44 | 2907 ^a | 21 | 1791 ^a | 14 | 0.62 | 9.21 |
| D4S139 | 6474 ^a | 58 | 3438 ^a | 24 | 0.62 | 9.21 |
| D5S110 | 3714 ^b | 26 | 2942 ^b | 21 | 0.62 | 9.21 |
| D10S28 | 1757 ^a | 14 | 1182 ^a | 12 | 0.62 | 9.21 |
| D17S79 | 1982 ^a | 15 | 1520 ^a | 13 | 0.62 | 9.21 |

^aCertified allele band size as stated in the National Institute of Standards and Technology Certificate of Analysis for Standard Reference Material 2390 “DNA Profiling Standard”, available from Standard Reference Materials Program, NIST, Gaithersburg, MD 20899 (1992). NIST will update this periodically.

^bMedian of data from 10 laboratories, compiled by Brian Hoey of the Missouri State Highway Patrol.

^cPredicted standard deviation for the band sizes, using equation:

$$SD = 7.5(1+bp/19500)^{7.1}$$

of: A.M. Stolorow; D.L. Duewer; Dennis J. Reeder; E. Buel; G. Herrin, Jr.; Interlaboratory Comparison of Autoradiographic DNA Profiling Measurements. 3. Repeatability and Reproducibility of Restriction Fragment Length Polymorphism Band Sizing, Particularly Bands of Molecular Size >10k Base Pairs. Analytical Chemistry 1996: 68(11), 1941-1947.

^dEmpirically determined for each locus using data supplied by numerous city, county, state, or Federal forensic laboratories. Correlations were determined for each laboratory supplying data (between 16 and 26 unique data sets, depending on locus). The median correlation at each locus was found to be 0.62±0.04.

^e $K_{0.99} = \chi^{-1}(0.01,2) = 9.21$. The inverse one-tailed (1-0.99) probability of the chi-squared distribution with two degrees of freedom is the limiting (infinite data) critical K for 99% coverage of a bivariate normal distribution.

Monomorphic Human DNA Controls

Monomorphic probes shall not be used concurrently with a probe for any locus in the table of RFLP Loci Accepted at NDIS.

Interpretation of DNA Profiles

1. DNA profiles submitted to NDIS shall be interpretable (interpretable - any DNA data that could be used to make an exclusion).

2. A laboratory submitting a DNA profile to NDIS that is derived from forensic evidence, shall only offer those bands that are attributed to the putative perpetrator(s). Alleles derived from forensic profiles that are unambiguously attributed to a victim or individuals other than the perpetrator(s), such as, but not limited to a husband or boyfriend, shall not be offered to NDIS.

3. The DNA results from any locus in which an ambiguity exists in the assignment of one or more alleles to the putative perpetrator(s) may be offered to NDIS. The mere observation of alleles that may be attributed to individuals other than the putative perpetrator, does not in itself, preclude offering DNA profiles to NDIS at that locus.

4. After image analysis, no "correction factors" that alter or adjust the readings derived directly from an image analysis workstation shall be applied to the DNA profile offered to NDIS.

RFLP Loci Accepted and Minimum RFLP Loci for a DNA Profile to be Accepted at NDIS

The inclusion of DNA profiles in NDIS derived from convicted offender, forensic samples, unidentified human remains, and population samples requires conclusive fragment size determinations from certain specific loci. There is a minimum number of loci from which conclusive results are required for profiles submitted to the forensic, unidentified human remains and convicted offender indexes. Additional loci on these samples shall then be accepted. DNA profiles which fail to include these loci (number and name) shall not be accepted by NDIS.

Table 2 constitutes all RFLP loci from which results shall be accepted by NDIS. The absence of any particular locus from this table does not suggest the unsuitability of the locus for forensic application. The addition of new RFLP loci shall be accepted by NDIS, upon approval by the NDIS Custodian.

| Table 2 RFLP Loci Accepted at NDIS | | | | | |
|------------------------------------|--------|---------------------------------|-----------------------|---|------------|
| Locus | Probe | Convicted Offender ¹ | Forensic ² | Unidentified Human Remains ² | Population |
| D1S7 | MS1 | Accepted | Accepted | Accepted | Accepted |
| D2S44 | YNH24 | Required | Required | Required | Accepted |
| D4S139 | PH30 | Required | Required | Required | Accepted |
| D5S110 | LH1 | Required | Required | Required | Accepted |
| D10S28 | TBQ7 | Required | Required | Required | Accepted |
| D14S13 | CMM101 | Accepted | Accepted | Accepted | Accepted |
| D16S85 | 3'HVR | Accepted | Accepted | Accepted | Accepted |
| D17S26 | EFD52 | Accepted | Accepted | Accepted | Accepted |
| D17S79 | V1 | Accepted | Accepted | Accepted | Accepted |

Any of these RFLP loci so indicated shall be accepted at NDIS.

¹The number required to be a complete profile for Convicted Offender is the required 4.

²An analysis of all 4 required loci must be attempted for both Forensic and Unidentified Human Remains. The minimum number of RFLP loci required for search purposes is 3 for Forensic and Unidentified Human Remains.

Application of probes

Alleles detected following the hybridization of a membrane shall be unambiguously ascribed to a single locus. Therefore, only one locus may be probed during the hybridization of a membrane. The mixing of probes to more than one locus for concurrent application to a single membrane is prohibited.

Molecular Weight Size Markers (MWSMs) Accepted by NDIS for RFLP Loci

The following MWSMs shall be accepted at NDIS:

1. Life Technologies BRL, DNA Analysis Marker System
2. Lifecodes, 23 kb sizing standard
3. Promega Genetic Analysis Marker Ladder

Polymerase Chain Reaction (PCR) Section

Protocol for PCR

PCR DNA Controls, allelic ladders and primer sets that were validated together shall be used together.

1. The laboratory shall demonstrate that it continues to use a protocol that produces NDIS compatible DNA results by its application of a positive PCR DNA Control that has been appropriately validated.
2. All DNA profiles offered to NDIS must be associated with an accurate result for PCR DNA Controls.
3. Only DNA profiles derived from analysis of NDIS Accepted PCR Kits (Table 3) shall be accepted at NDIS.

Changes to PCR Based Protocols (Per the FBI Quality Assurance Standards, page 2)

1. Any significant changes made to a protocol must be demonstrated to be non-detrimental to the PCR results, as indicated by appropriate PCR DNA Control results.
2. The use of a protocol that does not achieve the correct results for the PCR DNA Controls shall be discontinued.
3. At the request of NDIS, a laboratory shall demonstrate the reliability of data generated by the proposed protocol.

Allelic Ladders

1. The allelic ladders used must be from the list of NDIS Accepted PCR Kits (Table 3).
2. The allelic ladders used for each locus must give NDIS compatible results, as demonstrated by the PCR DNA Controls.
3. At each locus, the allelic ladder should have the commonly occurring alleles of the repeat element.
4. An NDIS Accepted Allelic ladder must be associated with each sample set.

Interpretation of DNA Profiles

1. DNA profiles submitted to NDIS shall be interpretable (interpretable - any DNA data that could be used to make an exclusion).

2. A laboratory submitting a DNA profile to NDIS that is derived from forensic evidence, shall only offer those alleles that are attributed to the putative perpetrator(s). Alleles derived from forensic profiles that are unambiguously attributed to a victim or individuals other than the perpetrator(s), such as, but not limited to a husband or boyfriend, shall not be offered to NDIS.

3. The DNA results from any locus in which an ambiguity exists in the assignment of one or more alleles to the putative perpetrator(s) may be offered to NDIS. The mere observation of alleles that may be attributed to individuals other than the putative perpetrator, does not in itself, preclude offering DNA profiles to NDIS at that locus.

NDIS Accepted PCR Kits

1. The following table (Table 3) provides the PCR Kits accepted by NDIS.
2. The absence of a PCR Kit from Table 3 does not suggest the unsuitability of that particular PCR Kit for forensic application.
3. The addition of a PCR Kit to Table 3 (NDIS Accepted PCR Kits) or modification of an existing PCR Kit, shall be made only after data are presented to NDIS, that demonstrates that the new PCR Kit generates NDIS compatible results, or the modification is justified.

| Table 3 - NDIS Accepted PCR Kits | |
|----------------------------------|---|
| Manufacturer | Kit Name |
| Promega | GenePrint PowerPlex 1.1(Catalog numbers DC6091/6090) |
| Promega | GenePrint PowerPlex 1.2 (Catalog numbers DC 6101/6100) |
| Promega | GenePrint PowerPlex 2.1 (Catalog numbers DC 6471/6470) |
| PE Applied Systems | AmpF/STR Profiler Plus (PIN 4303326) |
| PE Applied Systems | AmpF/STR Cofiler (PIN 4305246) |
| PE Applied Systems | AmpF/STR Profiler Plus and AmpF/STR Cofiler (PIN 4305979) |
| Promega Monoplex* | Monoplex D5S818 (Catalog number DC6161) |
| Promega Monoplex* | Monoplex D7S820 (Catalog number DC6141) |
| Promega Monoplex* | Monoplex D13S317 (Catalog number DC6151) |
| Promega Monoplex* | Monoplex D16S539 (Catalog number DC6131) |
| Promega Monoplex* | Monoplex TH01 (Catalog number DC5081) |
| Promega Monoplex* | Monoplex TPOX (Catalog number DC5111) |
| Promega Monoplex* | Monoplex CSF1PO (Catalog number DC5091) |
| Promega Monoplex* | Monoplex vWA (Catalog number DC5141) |

* Monoplexes are all fluorescence-labeled and have same chemistry as when in multiplex kits

PCR Profiles Offered to NDIS

1. The DNA result from each locus will be in the form p,q for heterozygotes (in ascending order) and p,p for homozygotes.
2. Alleles below or above the allelic ladder are entered as < (lowest allele) or > (highest allele), respectively.

PCR Loci Accepted and Minimum PCR Loci for a DNA Profile to be Accepted at NDIS

The inclusion of DNA PCR profiles in NDIS derived from convicted offender, forensic samples, unidentified human remains and population samples require conclusive results from a minimum number of specific loci/systems. DNA profiles which fail to include these loci, at a minimum, shall not be accepted by NDIS. There is a minimum number of loci from which conclusive results are required for profiles submitted to the forensic, unidentified human remains and convicted offender indexes. Additional loci on these samples shall then be accepted. DNA profiles which fail to include these loci (number and name) shall not be accepted by NDIS.

Table 4 constitutes all PCR loci from which results shall be accepted by NDIS. The absence of any particular locus from this table does not suggest the unsuitability of the locus for forensic application. The addition of new PCR loci shall be accepted by NDIS, upon approval by the NDIS Custodian.

| Table 4 PCR Loci Accepted at NDIS | | | | | |
|-----------------------------------|-------------------------|---------------------------------|-----------------------|---|------------|
| Locus | Chromosome Location | Convicted Offender ¹ | Forensic ² | Unidentified Human Remains ² | Population |
| CSFIPO | 5q33.3-34 | Required | Required | Required | Accepted |
| FGA | 4q28 | Required | Required | Required | Accepted |
| THO1 | 11p15.5 | Required | Required | Required | Accepted |
| TPOX | 2p23-2pter | Required | Required | Required | Accepted |
| VWA | 12p12-pter | Required | Required | Required | Accepted |
| D3S1358 | 3p | Required | Required | Required | Accepted |
| D5S818 | 5q21-31 | Required | Required | Required | Accepted |
| D7S820 | 7q | Required | Required | Required | Accepted |
| D8S1179 | 8 | Required | Required | Required | Accepted |
| D13S317 | 13q22-31 | Required | Required | Required | Accepted |
| D16S539 | 16q24-qter | Required | Required | Required | Accepted |
| D18S51 | 18q1.3 | Required | Required | Required | Accepted |
| D21S11 | 21 | Required | Required | Required | Accepted |
| Amlogenin | X:p22.1-22.3 Y:p11.2 | Accepted | Accepted | Accepted | Accepted |

Any of these PCR loci so indicated shall be accepted at NDIS.

¹The number required to be a complete profile for Convicted Offender is the required 13.

²An analysis of all 13 required loci must be attempted for both Forensic and Unidentified Human Remains. The minimum number of PCR loci required for search purposes is 10 for Forensic and Unidentified Human Remains.

Appendix

Waivers - General Information

NDIS shall conditionally accept DNA results obtained prior to the “Guidelines for a Quality Assurance Program for DNA Analysis” (TWGDAM Guidelines first published in 1989, footnote page 2), the effective date of the NDIS STANDARDS. The Quality Assurance Standards for Forensic DNA Testing Laboratories (effective October 1, 1998), and The Quality Assurance Standards for Convicted Offender DNA Databasing Laboratories (effective April 1, 1999), supersede the quality assurance guide lines adopted by TWGDAM. Waivers shall not be granted to DNA records derived after the issuance of NDIS STANDARDS, except as noted herein.

A waiver granted shall remain in effect until NDIS Custodian issues superseding NDIS STANDARDS, at which time previously granted waivers may be renewed upon approval by the NDIS Custodian.

Provisions Subject to NDIS RFLP Waivers

Applications for waivers to the sections from the NDIS STANDARDS relative to RFLP data listed previously may be submitted to the NDIS Custodian. The application shall specify the DNA results that are to be covered by the waiver. No other waivers shall be granted. Granting of a waiver is at the sole discretion of the NDIS Custodian.

Waiver - DNA Records Derived Prior to April, 1989

Waivers may be granted for those DNA records that were derived prior to the issuance of the TWGDAM Guidelines in April, 1989, at the discretion of the NDIS Custodian. The laboratory must demonstrate that the qualified DNA records were derived in a manner largely consistent with the TWGDAM Guidelines. The certification shall be signed and dated (date signed) by a DNA Supervisor, an individual who is administratively responsible for the DNA analysis work of laboratory personnel.

Waiver - Alternative Image Analysis Workstation (IAW) System

Data demonstrating that an IAW system other than that developed by the FBI (alternative IAW) produces reliable and NDIS compatible DNA records is required. Also, a test plan and data demonstrating the conversion of the electronic format of the DNA records to a NDIS compatible format are required. The electronic conversion of DNA records to a NDIS data compatible format must be demonstrated to retain the integrity of the DNA record through the conversion process.

DNA profiles derived using an alternative IAW software/work station shall only be accepted by NDIS after the alternative IAW has been demonstrated to meet all NDIS performance standards, including reliability, compatibility, and data integrity.

Waiver - RFLP Human DNA control

All analytical electrophoretic gels exhibiting DNA profiles for use by or inclusion in NDIS shall also exhibit a human DNA control. Human DNA controls other than K562 (alternative human DNA control) shall only be accepted when sufficient data are presented to determine acceptable values for the alternate human DNA control. The waiver shall only apply to analyses conducted prior to 90 days after the effective date of the NDIS STANDARDS.

Waiver for Minimum Loci Constituting a DNA Profile Accepted by NDIS

NDIS shall accept any locus listed as “NDIS Accepted Loci” for “convicted offender,” “forensic,” “unidentified human remains,” and “population” classes of specimens, where results are available for the specified minimum number of loci. Thus, NDIS shall accept any combination of loci for the “population” class of specimen and any combination of accepted loci beyond the required loci for the “convicted offender,” “forensic” or “unidentified human remains” classes of specimens; where these locus combinations are defined from among the “Loci Accepted at NDIS”: Pages 6 (Table 2) and 9 (Table 4).

Application for a Waiver

States intending to make application for a waiver of NDIS STANDARDS should write the NDIS Custodian for details.

Application for Acceptance of New Loci by NDIS

Applications for new loci to the NDIS STANDARDS may be submitted to the NDIS Custodian by a criminal justice agency. The addition of new loci to NDIS STANDARDS shall be made by the NDIS Custodian only after data presented to NDIS demonstrates that the new loci have been appropriately validated including forensic and population studies, and provide NDIS comparable results. The NDIS Custodian may request further validation by additional criminal justice agencies.

Correspondence

Any correspondence regarding NDIS STANDARDS FOR ACCEPTANCE OF DNA DATA should be sent to:

Attention: NDIS Custodian
Forensic Science Systems Unit
FBI Laboratory
935 Pennsylvania Avenue, Northwest, Room GRB-3R
Washington, DC 20535-0001

| Revision History | | |
|------------------|-------------|---------------------|
| Date | Author | Comments |
| 11 November 1996 | Barry Brown | Revised per TWGDAM* |
| 12 June 1998 | Barry Brown | Revised per TWGDAM* |
| 4 January 1999 | Barry Brown | Revised per SWGDAM* |
| 12 July 1999 | Barry Brown | Reviewed at SWGDAM* |
| 11 January 2000 | Barry Brown | Revised per SWGDAM* |

*The TWGDAM CODIS Subcommittee, later SWGDAM CODIS Subcommittee, reviews and makes revision suggestions on a regular basis.

Appendix B

No Suspect Cases Worksheet

Instructions for Completing the No Suspect Cases Worksheet

The purpose of this worksheet (Part 1 and Part 2) is to summarize the number, type, and location of no suspect cases within the applicant's State. This worksheet is provided for the applicant's discretionary use in an effort to assist the State in identifying and prioritizing no suspect cases, enhancing communication between affected governmental agencies and assisting the State in preparing their proposal. **Please do not return this worksheet with the proposal.**

No Suspect Cases Worksheet - Part 1

| Agency Name and Location | Total # potential no suspect cases | # cases to be verified as having no suspect at the time of processing | # cases verified as having the potential to lead to the perpetrator of the crime | # cases where victim is willing to press charges | # cases having standards (if applicable) | # cases within the statute of limitations | # cases identified as providing biological evidence | Total # eligible no suspect cases | Comments |
|--------------------------|------------------------------------|---|--|--|--|---|---|-----------------------------------|----------|
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Appendix C

Laboratory Participation Report

Instructions for completing the Laboratory Participation Report

Purpose:

The purpose of this report is to identify all State and local public DNA laboratories eligible to participate in this program and to demonstrate that all of these laboratories are given the opportunity to participate in the proposal process.

Total Number of Public DNA Laboratories in the State:

Give the total number of public DNA laboratories located in your State.

Laboratory Name and Location:

List the name and location of all public DNA laboratories within your State.

Laboratory Participation in NIJ No Suspect Program? (Yes/No):

After contacting each laboratory indicate by a “Yes or No” if the laboratory will be participating in the *No Suspect Casework DNA Backlog Reduction Program (FY2003)*. A laboratory may choose to participate in only one aspect of processing cases (e.g. screening evidence or entering profiles into CODIS) or a laboratory may choose to process cases that originated outside of their jurisdiction. If the laboratory chooses not to participate in the program a statement explaining why they choose not to participate must be attached. It is expected that applicants will incorporate all public DNA laboratories either by inclusion in the project or by written explanation of why they will not participate.

Identification and Prioritization:

Enter “X” if the laboratory will be participating in the identification and prioritization of no suspect cases according to the criteria outlined in the applicants proposal.

Screening for Biological Material:

Enter “X” if the laboratory will be screening evidence for biological material. If the proposal justifies that no screening will be done, enter “NA.” If the cases will be outsourced for screening, enter “OS.” If screening will be done by another public laboratory within the applicant’s State, enter “LIS.”

DNA Extraction:

Enter “X” if the laboratory will extract DNA. If cases/samples will be outsourced for extraction, enter “OS”. If extraction will be done by another public laboratory within the applicant’s State, enter “LIS.”

DNA Amplification:

Enter “X” if the laboratory will amplify DNA. If cases/samples will be outsourced for amplification enter, “OS”. If amplification will be done by another public laboratory within the applicant’s State, enter “LIS.” Samples must be amplified at the 13 CODIS core STR loci, see Section III.A.5 for information pertaining to partial profiles.

Generation of DNA Profiles:

Enter “X” if the laboratory will be generating DNA profiles (running the amplified product on a gel or by capillary electrophoresis). If the cases/samples will be outsourced, enter “OS”. If profiles will be generated by another public laboratory within the applicant’s State, enter “LIS.” Laboratories must attempt to obtain NDIS-acceptable profiles at the 13 CODIS core STR loci. See Section III.A.5 for information pertaining to partial profiles.

Analysis of DNA Profiles:

Enter “X” if the laboratory will be participating in the analysis of DNA profiles (using a procedure to identify/characterize alleles in a profile). If cases/samples will be outsourced for analysis enter, “OS”. If profiles will be analyzed by another public laboratory within the applicant’s State, enter “LIS.” Laboratories must attempt to obtain NDIS-acceptable profiles at the 13 CODIS core STR loci. See Section III.A.5 for information pertaining to partial profiles.

Interpretation of DNA Profiles:

Enter “X” if the laboratory will be interpreting DNA profiles (e.g. examining peak imbalances, identifying major and minor contributors, interpreting mixtures with known individuals). If the cases/samples will be outsourced for the interpretation of the profiles, enter “OS”. If the work will be outsourced and then the interpretation verified or reviewed by the public laboratory indicate “OS/X”. If profiles will be analyzed by another public laboratory within the applicant’s State, enter “LIS.” If the work will be performed by another public laboratory within the State and then verified, enter “LIS/X.” Laboratories must attempt to obtain NDIS-acceptable profiles at the 13 CODIS core STR loci. See Section III.A.5 for information pertaining to partial profiles.

Enter Profiles into CODIS:

In order to maximize the effectiveness of CODIS, all NDIS acceptable profiles must be expeditiously entered into the State DNA database. Indicate with an “X” if the laboratory will be entering profiles and searching CODIS.

Comments:

Include any information that you feel will help the peer-review panel understand the participation, cooperation and collaboration among the public DNA laboratories in your State. For example, laboratories that are not able to perform DNA testing may participate by doing screening thereby freeing analysts in another laboratory to interpret more profiles.

Codes:

- X - Public Laboratory will be performing work in their laboratory (work is being performed in the jurisdiction where the case originated).
- LIS - Work that is performed by another State or public laboratory outside of the jurisdiction where the case originated but within the applicant’s State.

- OS - Work outsourced (work that takes place by an accredited or certified State or local laboratory outside of the applicant's State or by a certified or accredited private vendor laboratory).
- NA - Not applicable, procedure will not be performed.

Laboratory Participation Report

State Name _____ Total Number of Public DNA Laboratories in the State ____

Insert Report into Section 4.D.2.b of the Proposal(Make additional copies of this form as needed)

| Laboratory Name and Location | Laboratory Participation in NIJ No Suspect Program? (Yes/No)# | Identification and Prioritization | Screening for Biological Material | DNA Extraction | DNA Amplification* | Generation of DNA Profiles* | Analysis of DNA Profiles* | Interpretation of DNA Profiles* | Enter Profiles into CODIS* | Comments |
|-------------------------------------|--|--|--|-----------------------|---------------------------|------------------------------------|----------------------------------|--|-----------------------------------|-----------------|
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If a Laboratory is not participating please attach short statement explaining why the laboratory has chosen not to participate.
 * Must include all 13 CODIS core loci.

Appendix D

Example Table of Contents for Proposals

Example Table of Contents for Use by Applicant in Submitting Proposals

Section 1 (Cover) - Standard Form 424

Section 2

- Geographic Areas Affected Worksheet
- Assurances
- Certifications Regarding Lobbying
- Disclosure of Lobbying Activities

Section 3

- Budget Detail Worksheet
- Budget Narrative
- Federal Funding Certification

Section 4

- Names and Affiliations of all Key Persons
- Proposal Abstract

Section 5

- Table of Contents
- Program Narrative
 - A. Proposal Abstract
 - B. Fulfillment of Solicitation Goals
 - C. Proposed Project
 - 1. Overview
 - 2. Specific Steps in Project
 - a. Narrative
 - b. Flow Chart
 - 3. Project Deliverables
 - a. Number of no suspect cases expected to be processed under this proposal
 - D. Fulfillment of Solicitation Objectives and Requirements
 - 1. Plan for the Identification and Prioritization of Cases
 - 2. Cooperation and Collaboration Among State Agencies
 - a. Narrative
 - b. Laboratory Participation Report
 - 3. Enhancement of State's Infrastructure
 - 4. Cost Effective DNA Testing
 - 5. Quality Results
 - 6. Identification and Monitoring of Outsourcing Laboratories (if applicable)

Section 6

- Privacy Certificate
- Form 310 (Protection of Human Subjects Assurance Identification/Certification/Declaration)
- Environmental Assessment

Section 7

- References/letters of cooperation from organizations collaborating on this project
- Resumes
- Statutory Assurance Form
- Appendixes

Appendix E

Statutory Assurance Form

Statutory Assurance

Pursuant to the provisions of 42 U.S.C. 3796kk-2, the applicant certifies that:

1. DNA analyses performed at the laboratory will satisfy or exceed the current standards for a Quality Assurance Program for DNA analysis issued by the Director of the Federal Bureau of Investigation under Section 14131 of Title 42 United States Code.
2. DNA samples obtained by and DNA analyses performed at the laboratory shall be made available only—
 - A. to criminal justice agencies for law enforcement identification purposes;
 - B. in judicial proceedings, if otherwise admissible pursuant to applicable statutes or rules;
 - C. for criminal defense purposes, to a defendant, who shall have access to samples and analyses performed in connection with the case in which the defendant is charged; or
 - D. if allowed by State statute, when personally identifiable information is removed, for a population statistics database, for identification research and protocol development purposes, or for quality control purposes;
3. And the laboratory and each analyst performing DNA analyses at the laboratory shall undergo semiannual external proficiency testing by a DNA proficiency testing program that meets the standards issued under 42 U.S.C. 14131, Quality Assurance and Proficiency Testing Standards.

Pursuant to the eligibility requirements of the DNA Analysis Backlog Elimination Act of 2000, the applicant certifies that:

4. the State will implement not later than 120 days after the date of application, a comprehensive plan for the expeditious DNA analysis of samples in accordance with Section 2 of the Act.
5. each DNA analysis carried out under the *No Suspect Casework DNA Backlog Reduction Program (FY2003)* shall be maintained pursuant to the privacy requirements described in section 210304(b)(3) of the Violent Crime Control and Law Enforcement Act of 1994 (42 U.S.C. 14132(b)(3));
6. the State has determined by statute, rule or regulation, those offenses under State law that shall be treated for purposes of Section 2 of the Act as qualifying State offenses;
7. No dollars of this grant amount will be used for processing/DNA analysis of convicted offender samples.
8. The Budget Narrative clearly identifies the funds requested for no suspect casework.
9. The Budget Narrative clearly identifies the funds requested for increasing the capacity (e.g. equipment, training) of the laboratories owned by the State or by units of local government within the State to carry out processing/DNA analyses of samples from no suspect casework.

Certifying Official

Title

Signature

Date