

FY19 DNA CAPACITY ENHANCEMENT AND  
BACKLOG REDUCTION PROGRAM

APPLICATION

Submitted by the

FORENSIC SERVICES BUREAU

of the

VENTURA COUNTY SHERIFF'S OFFICE

VENTURA, CALIFORNIA

April 24, 2019

## ABSTRACT

In this grant application the Forensic Services Bureau (FSB) is requesting funds to continue funding a fixed term DNA position and to help reduce the backlog. The DNA position was established seven years ago through this grant.

The FSB would like to continue employment of a Forensic Scientist III in the DNA section. This individual will help screen evidence and conduct DNA analysis.

The overall objective of this grant is to improve DNA analysis capacity and to reduce the number of backlogged DNA cases. The laboratory's goals are 1) To reduce the number of pending cases by sixty cases per year. This will result in an additional 20 to 30 DNA profiles being entered into CODIS each year with an anticipated result of four to eight CODIS hits per year.

## PROGRAM NARRATIVE

Eligibility Statement: The Ventura County Sheriff's Forensic Services Bureau (VCSFSB) is the agency that is responsible for analyzing evidential material associated with criminal investigations for all local law enforcement agencies and medical examiners within the county of Ventura. The VCSFSB operates one

regional forensic science laboratory throughout the County of Ventura. The laboratory has full forensic DNA casework capabilities. The FSB processes approximately 10,000 cases yearly and serves a population base of about 830,000 (according to the 2014 census estimates), including cities, unincorporated areas, and federal and state installations.

The FSB has been ASCLD/LAB accredited since 2003, it was accredited under ISO standards in 2008 and 2013 and ANAB in 2018. In addition, The VCSFSB DNA casework unit undergoes external quality assurance audits in accordance with the FBI's Quality Assurance Standards at least once every two years. The VCSFSB DNA laboratory also conducts internal audits once per year.

All eligible DNA profiles obtained with funding from this program will be entered into CODIS and, where applicable, uploaded to NDIS. The VCSFSB DNA lab is an NDIS-participating lab in good standing. All DNA analyses performed under this program will be maintained in accordance with applicable Federal privacy requirements and state laws.

Ventura County is fortunate to have one of the lower crime rates in California. Appendix A2 includes a table of funding summarizing an agreement among the various crime lab directors in California as to the distribution of Grant funds. The proposed budget for this application is based on the allocation proposed in this letter.

Statement of Problem: In common with other forensic laboratories, the FSB has not been able to keep up with the demand for services, particularly in the area of DNA analysis. Currently, for every 100 requests submitted for DNA typing, the laboratory only processes 86; other requests are eventually cancelled without processing. Similar figures apply to those cases that qualify for screening. During 2018 the median time from initial scheduling of DNA work to completion of the case was 67 days (for those cases taken through DNA typing).

The total casework backlog in the forensic biology section of the FSB is currently 173\* cases, of which approximately 55 are UCR part 1 crime cases. We anticipate that the backlog will continue to grow. Each analyst works approximately 60 DNA cases per year which represents about 684 samples per year. We are a NDIS participating lab in good standing and all eligible DNA profiles are uploaded into CODIS. The DNA program follows all applicable Federal privacy regulations. We do not do DNA databasing; therefore, there is no backlog. (\*There were over 1,000 “touch” DNA cases that were not be worked because of insufficient staffing and these cases have been canceled).

Project Design and Implementation: The laboratory estimates that funding from this grant will allow us to reduce the number of pending cases by 60 cases per year or eight percent of the total backlog. It should not change our individual analyst output of 60 DNA cases per year or 684 samples per year.

The overall objective of this grant is to improve DNA analysis capacity and to reduce the number of backlogged DNA cases. The laboratory's goals are 1) To reduce the number of pending cases by 60 per year using the grant funded DNA analyst. We anticipate that the grant-funded person will be able to analyze about 684 samples per year, which results in about 60 cases per year. Completing 60 cases per year will result in an additional 25 to 35 DNA profiles being entered into CODIS each year with an anticipated result of three to ten CODIS hits each year. All cases will be worked in house.

We have found, from our experience with a Coverdell grant, that adequate staffing is the key to reducing backlog. Therefore, to meet the goals of this grant, the laboratory is requesting that most of the funds be used to continue employment of a forensic scientist. This forensic scientist will screen and analyze forensic evidence that may contain DNA. The laboratory is requesting 3% of the total funding be used for training and travel (continuing education) purposes.

The laboratory's goals and objectives are:

- 1) To reduce the number of pending cases by 120 during the two-year grant period. We anticipate that the grant-funded person will be able to analyze about 1368 samples during the two-year grant period, which results in about 120 cases.

Completing 120 cases will result in an additional 35 to 50 DNA profiles being entered into CODIS with an anticipated result of twelve to seventeen CODIS hits. All cases will be worked in-house.

Objective A: Fund an analysts' salary. The FSL would like to continue employment of a Forensic Scientist II/III in the DNA section. This individual will help screen evidence and conduct DNA analysis.

Objective B: Fund analysts' travel to conferences and training opportunities. Provide required continuing education. By the end of the award period, it is expected that five analysts will have fulfilled their required continuing education through this grant.

Capabilities and competencies: Michael Parigian – Assistant Laboratory Manager. Responsible for budget tracking and reporting. Raul Villa - Fiscal Officer IV. Responsible for submitting financial reports. Shanin Barrios and Suzette Sanders – Section supervisors. Responsible for technical direction and sample processing. Christina Tokatlian – CODIS manager and examiner

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Details of the planned expenditures are found in the Budget Narrative and Budget Spreadsheet sections of this application.

Attachment A1 of this application contains copies of the laboratory's certification certificates.

Plan for collecting the data: Data collection will be collected via our laboratory information management system (LIMS). Chrystal Craver, our quality control supervisor, collects data for the entire laboratory once a month. Michael Parigian, assistant laboratory manager, compiles the data necessary for the grant performance measures. The data collected is accurate and auditable through our LIMS statistic's program. It will be available for review for 3 years post end date of the award. All applicable performance measures detailed in the solicitation will be addressed.

Our LIMS captures the date the evidence was received into our property room. When the analyst completes the case, their initials and a completion date are entered into the system. Once the technical review is complete, the person who did this review will enter their initials and date. Once the administrative review is complete, the person who did this review will enter their initials and date. The report is released at this time. The turn-around time is automatically calculated in LIMS from the date the evidence was received by the property room until the date of the administrative review. To calculate the turn-around time, we put in a specific time period into our LIMS statistical program and ask for all cases completed during this time period. Once the data is retrieved, we look at the mean average of all cases reported during that time period and record the average turn-around time.



The statistical program in our LIMS generates a list of work completed by each analyst done in any given time period. It tracks the amount of cases completed as well as the number of items (samples) completed. The average number of DNA samples completed does not include controls and is calculated for all samples analyzed in the reporting period. The average number of DNA samples worked/analyst/month is calculated by taking the total number of items completed by the DNA section (this number is totaled by hand from the LIMS printout from each analyst's data) and it is divided by the number of DNA analysts.

We calculate our backlogged cases by utilizing an Electronic Request For Analysis (ERFA) system that records the creation date for each request. Any cases that we have in our queue more than 30 days past this date is considered backlogged. Note: This date is different from the date that the evidence is received into our Property Room.

We calculate the cases analyzed by utilizing our LIMS. Cases are considered complete after they have been technically and administratively reviewed and signed off in LIMS. Our LIMS database tracks the initials of each person assigned a case. It will give us case completion data for the grant-funded analyst. (Note: Technicians may prepare cases in batches that then go on to the scientist for examination).

We track the number of profiles entered into CODIS by utilizing CODIS itself. CODIS will generate a list of all of the profiles entered into the system during a specific time period. The list has the analyst's name assigned to that profile. A manual count of the number of profiles entered by the grant-funded analyst during the specific time period is done. This CODIS list is then compared to "hit" list printed from CODIS. We are able to extract the information that is required for the grant-funded position from these two lists. This data is kept in the grant binder for each reporting period.

Baseline Backlog Data: See Appendix A3