

**Paul Coverdell Forensic Science Improvement Grants Program**

**CFDA No. 16.742**

**Submitted by the  
Ventura County Sheriff's Office  
Forensic Services Bureau  
Ventura, CA 93009**

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## **STATEMENT OF THE PROBLEM**

The Ventura County Sheriff's Office Forensic Services Bureau (FSB) is an internationally-accredited, full-service, regional crime laboratory supporting all law enforcement agencies in Ventura County. The FSB provides forensic analysis in the disciplines of forensic toxicology (including blood alcohol analysis), controlled substances and breath alcohol calibration, crime scene investigations and fingerprints, forensic biology and DNA, firearms and toolmarks, and comparative analysis. The FSB typically processes over 10,000 cases a year and serves a population of approximately 840,000 people, including cities, unincorporated areas, and state and federal installations.

As with many forensic laboratories across the country, the Ventura County Sheriff's Office Forensic Services Bureau is struggling with budgetary restrictions that impact our operation. Increasing backlogs, aging technologies, and the loss of key personnel all affect our ability to provide the highest quality and timeliness of our forensic services that is justifiably expected of us. Although we have been extremely fortunate up until this point, we cannot risk the very real possibility of our backlogged cases resulting in cases being dismissed by the criminal justice system that we work so hard to serve.

The proliferation of heroin and synthetic opioids like fentanyl have had a crushing effect on our crime laboratory. Patrol officers and investigators throughout the County have recently been mandated to stop drug testing (color test by NiK kit) in the field. All samples collected now come to the laboratory for analysis and patrol officers no longer can testify at preliminary hearings to their preliminary results by color testing. This has significantly impacted lab resources. In addition, synthetic opioids are more

difficult to analyze than traditional opiates and validating methods for new drugs as they emerge slows the processing of these samples.

For example, the staff of the Controlled Substances Unit is in a constant state of stress because of the backlog. The unit is currently running at maximum capacity and simply cannot keep up with the incoming cases while simultaneously addressing the growing backlog. One person was recently out on medical leave and the backlog increased dramatically, drastically affecting their capacity to not only process the thousands of controlled substances cases they receive each year, but also preventing them from meeting court deadlines. The backlog in the Controlled Substance Unit ballooned to over 400 cases and the turnaround times have lengthened substantially from 10 days to 40 days.

Another example, the Fingerprint Unit of the Crime Scene Investigations and Fingerprint Section was devastated by the loss of five of its six examiners within a very short time frame, drastically affecting their capacity to not only process the hundreds of fingerprint cases they receive each year, but also preventing them from effectively training the new examiners brought into the unit. We hired a consultant to come in and train the new examiners. During that training time the backlog in the Fingerprint Unit has grown to a staggering 500 fingerprint processing cases. Without assistance, we are projecting that these numbers will not decrease for a significant period of time. However, we are highly optimistic that these challenges can be overcome.

Through the use of the requested grant monies, the Ventura County Sheriff's Office Forensic Services Bureau aims to improve the quality and timeliness of our forensic services and reduce or eliminate the number of backlogged cases in firearms, latent prints, toxicology, controlled substances, and forensic biology without adding additional personnel.

### **PROJECT/PROGRAM DESIGN AND IMPLEMENTATION**

In recent years, the forensic sciences have come under increasing scrutiny to ensure the strength and reliability of forensic science in our courtrooms. Indeed, the Criminal Justice and Forensic Science Reform Act (S. 2177) introduced by Senate Judiciary Committee Chairman Patrick Leahy (D-Vermont.) and Senator John Cornyn (R-Texas) four years ago proposed sweeping legislation to improve the quality of forensic science by promoting national accreditation and certification standards for crime laboratories and forensic practitioners, as well as the development of best practices and a national forensic science research strategy.

Moreover, the National Commission on Forensic Science – a joint initiative between the U.S. Department of Justice and the U.S. Department of Commerce National Institute of Standards and Technology (NIST) – will have profound implications on the future of forensic science across the United States. The resulting Organization of Scientific Area Committees (OSAC) will undoubtedly establish standards that will include most of the forensic science disciplines.

By completing backlogged cases, a process where evidence samples can flow through the laboratory in an efficient and proficient manner will develop. In addition, the organizational culture will change from panic to one of identifying problems and finding solutions to those problems. The quality of the work product will increase. Finally, the morale within the

laboratory will increase by creating a positive teamwork atmosphere with each employee performing at the highest level.

The proposed plan will increase the quality and quantity of the work that we do and to focus the laboratory on a track to reduce or eliminate the backlog. It would enable the current staff to become more efficient and would also decrease the turnaround time of cases.

In summary, as with many forensic laboratories across the country, we continue to struggle with budgetary restrictions whilst striving to provide the highest level of quality and timeliness of forensic analytical results for our customers. We believe that we can address and improve the quality and timeliness of our forensic services and reduce the number of backlogged cases by using overtime with a view to increase throughput and decrease backlog and turnaround time, and without the need for additional personnel.

#### **CAPABILITIES/COMPETENCIES**

- The Controlled Substances Unit is staffed by one Supervising Forensic Scientist and five Forensic Scientists. There are six listed below because one member rotates into blood alcohol each month.
  - Deby Mittelbrun – Supervising Forensic Scientist. Deby has over 25 years of forensic experience.
  - Trevor Booth – Forensic Scientist III. Trevor has 11 years of forensic experience.
  - Eileen Boyd – Forensic Scientist III. Eileen has 17 years of forensic experience.
  - Maria Contreras – Forensic Scientist III. Maria has 9 years of forensic experience.

- Regina Davidson – Forensic Scientist III. Regina has 16 years of forensic experience.
  - Emily Orbach – Forensic Scientist III. Emily has 9 years of forensic experience.
  - Arsenio Ricafrente – Forensic Scientist III. Arsenio has 30 years of forensic experience.
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- The Toxicology Unit is staffed by one Supervising Forensic Scientist and six Forensic Scientists.
    - Fabiola Nunes-Daniel – Supervising Forensic Scientist. Fabiola has 15 years of forensic experience.
    - Lucinda Bernardino – Forensic Scientist III. Lucinda has 9 years of forensic experience.
    - Scott Colley – Forensic Scientist III. Scott has 18 years of forensic experience.
    - David McGuire – Forensic Scientist III. David has 19 years of forensic experience.
    - Nelly Mikhaltsevich – Forensic Scientist III. Nelly has 1 year of forensic experience.
    - Keith Nakagawa – Forensic Scientist III. Keith has 24 years of forensic experience.
    - Cynthia Navarro – Forensic Scientist III. Cynthia has 1 year of forensic experience.
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- The Firearms Unit is staffed by one Supervising Forensic Scientist and three Forensic Scientists.
    - Song Wicks – Supervising Forensic Scientist. Song has over 15 years of forensic experience.
    - Jason Kwast – Forensic Scientist III. Jason has over 10 years of forensic experience.
    - Derek Poon – Forensic Scientist III. Derek has 8 years of forensic experience.
    - James Roberts – Forensic Scientist III. James has over 30 years of forensic experience.

- The Fingerprint / CSI Unit is staffed by one Supervising Forensic Scientist (currently unfilled) and six Sheriff Service Technicians and three Forensic Scientists.
  - Dennise Heredia – Forensic Scientist III. Dennise has 3 years of forensic experience.
  - Kristin Rogahn – Forensic Scientist III. Kristin has 22 years of forensic experience.
  - Gloria Smith – Forensic Scientist III. Gloria has 3 years of forensic experience.
  - Jesse Castillo – Sheriff Service Technician. Jesse has 20 years of experience.
  - Ebony Adam-Galiola – Sheriff Service Technician. Ebony has 6 years of experience.
  - Carlos Orantes – Sheriff Service Technician. Carlos has 13 years of experience.
  - Mike Purcell – Sheriff Service Technician. Mike has 8 years of experience.
  - Maria Santa Rosa – Sheriff Service Technician. Maria has 10 years of experience.
  - Unfilled – Sheriff Service Technician.

Key personnel for this grant include:

- Nivanjit Gill – Forensic Services Bureau Manager. Dr. Gill is responsible for overall direction of the grant and has over 30 years of experience in forensic science.
- Michael Parigian – Assistant Forensic Sciences Laboratory Manager. Mr. Parigian is responsible for budget tracking and reporting and has over 32 years of experience in forensic science, including more than fourteen years as an Assistant Forensic Sciences Laboratory



Manager. His duties include managing the bureau budget as well as oversight and preparation of reports for the Coverdell grants.

- Geoff Bruton – Assistant Forensic Sciences Laboratory Manager. Responsible for budget tracking and reporting. Mr. Bruton has 18 years of experience in forensic science, including successful completion of federal grants.

All key personnel are employees of the Ventura County Sheriff's Office Forensic Services Bureau and are located at 800 South Victoria Avenue, Ventura, California. They can all be reached by telephone at (805) 654-2370.

Statements of Qualifications for these persons can be found in Appendix A.

#### **IMPACT/OUTCOMES AND EVALUATION/PLAN FOR COLLECTING DATA FOR PERFORMANCE MEASURES**

The FSB utilizes a Laboratory Information Management System (LIMS), which has the capability of identifying the number, identity, and types of examinations pending. It also tracks the assignment, completion, turnaround time, and other information related to these cases through its statistical functions. It readily exports this information into reports. From the LIMS data, the FSB will track the turnaround time and the number of cases completed by the Laboratory.

The Quality Assurance supervisor of the FSB is responsible for accumulating and reporting all the statistics related to the productivity of the laboratory. This individual, Chrystal Craver, reports directly to the Forensic Services Bureau Manager. She provides monthly reports related to backlog, turnaround time, and completed work as part of her regular duties. She also tracks historical data regarding these same statistics. The historical data is retained for more than five years and goes back to 2003.

#### **OTHER/PART 1 VIOLENT CRIMES DATA**

As can be seen in the accompanying data, Ventura County is a relatively safe place to live within the State of California. Indeed, two of the largest cities in Ventura County with a population of over 100,000 (Thousand Oaks and Simi Valley) consistently rank as two of the safest cities in the country. However, it is of vital importance to note that their ranking is no accident. There is a very strong commitment to law enforcement and criminal justice from all of the law enforcement agencies within the county and from the District Attorney's Office. This includes well-forged relationships with the Ventura County Forensic Services Bureau. The professionalism, expertise, and commitment of our staff are part of the key to successfully ensuring the public safety for all residents of Ventura County. However, as we have described above, this does not mean that we do not need assistance in achieving our vision – very much the opposite. Without your support, the safe environment that our residents enjoy to live, work, and raise their families is in jeopardy. We highly depend upon and utilize grant monies in order to ensure that we provide the very best service to all of those who depend on us.

**STATE OF CALIFORNIA UNIFORM CRIME REPORTING STATISTICS, 2014-2016**

Year	Population	Murder and Non- negligent Manslaughter	Forcible Rape	Robbery	Aggravated Assault	Burglary	Larceny- Theft	Motor Vehicle Theft	Violent Crime Total	Property Crime Total	Violent Crime Rate	Property Crime Rate
2014	31,979,516	1,339	7,760	43,496	72,177	167,433	518,246	128,985	124,772	814,664	3.90	25.47
2015	32,327,418	1,456	10,673	46,918	78,300	162,229	575,940	144,209	137,347	882,378	4.25	27.30
2016	32,747,075	1,511	11,482	48,985	83,227	155,907	559,320	150,528	145,205	865,755	4.43	26.44

Rates are the number of reported offenses per 1,000 population.

Sources: FBI, Uniform Crime Reports, prepared by the National Archive of Criminal Justice Data.

# VENTURA COUNTY UNIFORM CRIME REPORTING STATISTICS, 2014-2016

Year	Population	Murder and Non- negligent Manslaughter	Forcible Rape	Robbery	Aggravated Assault	Burglary	Larceny- Theft	Motor Vehicle Theft	Arson*	Violent Crime Total	Property Crime Total	Violent Crime Rate	Property Crime Rate
2014	842,603	20	185	682	1,002	3,207	12,023	1,397	84	1,889	16,711	2.24	19.83
2015	848,073	23	210	677	1,271	2,990	12,448	1,612	95	2,181	17,145	2.57	20.22
2016	855,988	31	265	726	1,161	2,886	11,675	1,606	112	2,183	16,279	2.55	19.02

Rates are the number of reported offenses per 1000 population.

\*Arson: additional recorded information.

Source: Cumulative of FBI UCR Publication Years 1991 through 2016 information provided by local jurisdiction; Ventura County Sheriff's Office Crime Analysis Unit.