

## FY2014 Paul Coverdell Forensic Science Improvement Grants Program Abstracts

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**FY14 Recipient Name:** Alaska Department of Public Safety

**Award Number:** 2014-CD-BX-0013

**Award Amount:** \$63,029

**Abstract:** FORMULA - The goals of this project are to improve the quality and timeliness of forensic science and medical legal death investigation services provided by the State of Alaska Department of Public Safety's Scientific Crime Detection Laboratory (SCDL) and State of Alaska Department of Health and Social Services State Medical Examiner's Office (SMEO) to Alaska's law enforcement agencies and to eliminate or drastically reduce backlogs in the analysis of forensic evidence. The objectives for this project are to: 1. Maintain the accuracy, reliability, and credibility of results obtained through forensic analysis of samples submitted for identification, and the accurate determination of cause and manner of death. 2. Decrease the number of days between submission of a sample and delivery of test results to the requesting agency. 3. Eliminate/reduce the backlog of samples and unidentified human remains awaiting forensic analysis. The Alaska Scientific Crime Detection Laboratory and State Medical Examiner's Office proposes to use FFY 2014 Coverdell grant funds to: 1. Fund overtime for the analysis of backlogged latent print requests 2. Training for staff who are directly and substantially involved in providing forensic science services 3. Offset the cost of the external accreditation assessment and costs related to annual proficiency tests for analysts. These items and activities will support the achievement of the goals and objectives of this project.

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**FY14 Recipient Name:** Alabama Department of Economic and Community Affairs

**Award Number:** 2014-CD-BX-0062

**Award Amount:** \$108,253

**Abstract:** FORMULA - The ADFS plans to utilize the FY2014 "Formula Grant Program" funds to improve its network capability through improved communication speed, its analysis capability through additional laboratory supplies, and its technical capability through increased knowledge and skills learned by the ADFS's personnel and updated operations implemented in its laboratories. Specifically, the ADFS plans to use these funds to attain the goals of (1) improving upon the capabilities of the ADFS's laboratory information management system (LIMS) Information Technology (IT) network by replacing five antiquated network switches, (2) aiding in the reduction of case backlogs via the purchase of morgue and laboratory supplies to be utilized performing autopsies and scientific analysis/casework, and (3) providing cost-effective training for ADFS internal staff, forensic students, and law enforcement agencies by facilitating the transmission of technical forensic information via seminars, administrative conferences, and meetings, as well as providing training for state-level and federal-level court testimony that will allow the ADFS to make an immediate impact on its abilities to correctly address pending court cases, enhance departmental operations, provide local enforcement agencies with improved crime scene processing, forensic analysis and investigation services, and produce competent work products from its employees. By attaining these goals, the ADFS will continue implementing its plan to provide its personnel and laboratories with sufficient equipment and resource materials that will improve the ADFS's ability to address the forensic science needs throughout the State. The "Discretionary" funds will (1) improve the analysis capabilities of the ADFS's Chemistry Section through the purchase of a gas chromatograph/mass spectrometer (GC/MS), with auto liquid sampler (ALS) and data system to work drug chemistry cases as a means of addressing increasing case backlogs, and (2) improve its evidence-tracking and case-reporting systems with the purchase of 39 new Laboratory Information Management System (LIMS) computers. The impact of these funds through the subsequent purchase of these items will positively affect the turnaround time and forensic reporting capability of the ADFS's laboratory system. The realization of these efforts is in direct support of the Coverdell NFSIA Program's goals, and clearly maximizes the impact of such federal funding. The ADFS's Chemistry Section continues to face a backlog of over 19,000 cases. This backlog is due primarily to employee attrition and the lack of funds that would be used to hire replacement staff. It is also due to a lack of instrumentation capacity for case work analysis. The

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ADFS's Chemistry Section has an insufficient number of analytical instruments that would assist in addressing this backlog. One year ago, this backlog amounted to 8,000 cases, but the Chemistry Section experienced four of its employees leaving ADFS and two functioning GC/MS instruments were lost due to normal wear and tear on the instruments. The Chemistry Section's addition of another GC/MS instrument with a robotic autoinjector would impact its backlog of drug case analyses by increasing the number of controlled substance items analyzed each business day. And with the addition of an autosampler, the GC/MS instrument can be operated without the constant presence of a scientific analyst in the room, thereby allowing samples to be run continuously overnight. The replacement of 39 antiquated and non-functioning Laboratory Information Management System (LIMS) computers will positively impact the ADFS's current method of handling, documenting, and tracking the evidence in its possession. The new computers will allow the ADFS to speed-up such evidence tracking, handling, and documenting, and will improve its ability to report the forensic casework analyses on said evidence. Many of the LIMS computers will be placed on the forensic analysts' bench areas, thereby reducing each analyst's need to leave the laboratory area to report on his/her cases. The ADFS's management staff has determined that the more time its analysts spend in the laboratory area, the more cases are completed and reported. Thus, by increasing the number of LIMS computers used for reporting cases, and by decreasing the number of steps between the case work analysis area and the report writing area, an efficient and productive work place dynamic is created.

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**FY14 Recipient Name:** Arkansas Department of Finance and Administration

**Award Number:** 2014-CD-BX-0061

**Award Amount:** \$66,276

**Abstract:** FORMULA - The Arkansas State Crime Laboratory (ASCL) is a full service forensic laboratory serving the entire state of Arkansas. This includes 75 counties with a population of approximately 3 million individuals. The ASCL is accredited by the American Society of Crime Laboratory Directors - Laboratory Accreditation Board (ASCLD/LAB) in the Legacy Program. Initial accreditation was achieved in 2004 and was renewed in 2009. The ASCL is currently progressing towards ASCLD/LAB International accreditation. The Medical Examiner's Office received National Association of Medical Examiners (NAME) accreditation in 2010. The ASCL employs eighty-five (85) analysts in the disciplines of CODIS, Forensic DNA, Drug Analysis, Forensic Toxicology, Physical Evidence (Trace and Serology Units), Firearms/Toolmarks, Latent Prints and Digital Evidence. In addition, the ASCL has a Medical Examiner's Office that employs five (6) Medical Examiners, six (5) Field Investigators and six (6) Morgue Technicians. The National Academy of Science (NAS) Report, "Strengthening Forensic Science in the United States: A Path Forward" encourages further advances in the forensic science disciplines. One avenue to make advances in the forensic field is for forensic professionals across the nation to collectively meet to discuss current issues and trends. Individuals attending National and Regional meetings in their discipline can collectively discuss with laboratories across the nation improvements to current techniques and introducing new techniques/technologies to the field. This information can then be implemented in the laboratory. This collaboration aids in improving the quality and timeliness of forensic services. Goals of the program: To improve the quality and timeliness of forensic services. Objectives to support the goals: 1. To provide professional development opportunities to forensic analysts and Medical Examiner staff 2. To continue the ASCLD/LAB and NAME accreditation programs. Project Strategy: To achieve objective #1, analysts and Medical Examiner staff will attend National/Regional meetings and training seminars related to their discipline. Objective #2 will be achieved by continuing to meet the training standards by the accrediting bodies. Anticipated Outcomes: Attendees of National/Regional meetings and training seminars will bring back quality and/or timeliness improvements that can be implemented at the ASCL.

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**FY14 Recipient Name:** Arizona Criminal Justice Commission

**Award Number:** 2014-CD-BX-0015

**Award Amount:** \$148,405

**Abstract:** FORMULA – As the State Administering Agency for Department of Justice funding, the Arizona Criminal Justice Commission (ACJC), is applying to the Paul Coverdell Forensic Science Improvement Grant Program on behalf of the Arizona Department of Public Safety Forensic Crime Laboratory, three local forensic laboratories, and one county medical examiner’s office in a collaborative effort to standardize our state and local laboratories. Supporting a state strategic plan for forensic laboratory improvements, grant funds will further the state’s ability to improve the quality and timeliness of forensic science and medical examiner services. Program Goal is to improve crime laboratories throughout the state of Arizona, the grant funds will be used for training and educational opportunities, personnel overtime, purchasing necessary equipment and laboratory certification fees. Agencies working in this collaborative effort include Arizona Department of Public Safety Crime Laboratory; Mesa, Phoenix, and Scottsdale police department crime laboratories; and the Maricopa County Office of the Medical Examiner. Laboratories will advance components of the state strategic plan for forensic laboratory improvements by supporting recommendations to annually dedicate funding for training programs, overtime to reduce backlogs, and equipment purchase. Project Design & Methodology: the laboratories have an essential need for funding to provide education and certification for the forensic examiners. Funding to send examiners to classes, conference and seminars around the country are priorities of the laboratories as specified in the state strategic plan for the forensic laboratory improvements. In order for program goals to be met, laboratories need to keep pace with the growing number of requests for analysis. This requires using funds to allow staff to work overtime in some instances and increasing laboratory capacity by purchasing equipment in others. Reporting Process: the Arizona Criminal Justice Commission (ACJC) is applying for and will manage grant funds on behalf of each of the five sub-grantee agencies. ACJC provides grant oversight and is responsible for reporting to the National Institute of Justice (NIJ) on grant progress. Upon receipt of grant funds, ACJC will award contracts to each of the five agencies. Funds will be reimbursed quarterly after submission of progress and financial reports by each laboratory.

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**FY14 Recipient Name:** Phoenix Police Department

**Award Number:** 2014-CD-BX-0068

**Award Amount:** \$174,996

**Abstract:** COMPETITIVE - The City of Phoenix Police Department’s (PPD) Laboratory Services Bureau (LSB) is an ASCLD/LAB and FQS-I accredited laboratory and consists of a staff of 136 positions (as of 02/14/14, filled, civilian positions) serving the sixth largest city in the country, with over 1.4 million residents (<http://phoenix.gov/citygovernment/facts/stats/census/index.html>). The City of Phoenix is dealing with a difficult economic environment, resulting in significant constraints to the laboratory’s budget. Despite the difficult financial challenges, the LSB remains committed to its mission of providing the highest quality forensic services and scientific technical support to the criminal justice community. Meeting this mission requires a well-staffed, trained and equipped laboratory. To assist in the continuance of its mission, the LSB is seeking \$174,996 in Paul Coverdell Forensic Science Improvement Grant Program funds to provide overtime for key forensic science personnel. Overtime will enhance the productivity of the laboratory in an effort to reduce backlogged requests for forensic analysis (thereby increasing timeliness) in the following two areas of the laboratory: Evidence Processing, Latent Print

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Comparative (+ AFIS). Items to be analyzed for forensic evidence are collected in the field by LSB Crime Scene Response (CSR) staff and PPD officers and detectives. The Evidence Processing Unit (EPU) analyzes these items for both impression and biological evidence, and forwards the resulting evidence to other LSB Sections, to include the Latent Print Comparative Section (LPCS). The LPCS receives latent finger and palm prints from EPU, CSR, officers, and detectives to be initially evaluated for entry into the Automated Fingerprint Identification System (AFIS). Latent prints which remain unidentified upon an AFIS search are then analyzed by the LPCS for manual comparison to known subjects. Submissions are made to both EPU and LPCS on a daily basis, compounding the backlog. Funding for overtime to be worked by personnel from these two sections will greatly benefit the LSB; up to 2000 requests for analysis will be completed utilizing the requested funds. Ultimately, these funds will allow the LSB to provide a service to the residents of Phoenix and the community as a whole by increasing the opportunity to identify those involved in criminal activity in a timelier manner.

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**FY14 Recipient Name:** City of Los Angeles

**Award Number:** 2014-CD-BX-0020

**Award Amount:** \$ 168,980

**Abstract:** COMPETITIVE - Under the 2014 Paul Coverdell Grant Program, the Los Angeles Police Department (LAPD) is seeking funding to validate and implement the BULLETRAX system, a new ballistic identification technology that captures high-resolution images and topographic information from fired bullets at the nanometer level. Shooting crimes typically result in two types of physical evidence for investigators; a bullet or, if a semi-automatic pistol is used, a cartridge case. For the past 20 years, the LAPD has used the BRASSTRAX ballistic technology system for identifying cartridge cases. However, nearly one-third of violent shooting crimes in Los Angeles are committed with revolvers, which leave bullets behind as the only physical evidence. The LAPD is currently moving from a staff-intensive, hands-on analysis of each bullet to a more effective, efficient and technologically advanced process for identifying bullets via the newly created BULLETRAX ballistic identification system. The new BULLETRAX system is the only bullet ballistic identification tool of its kind. In March 2014, the LAPD Firearms Analysis Unit (FAU) was fortunate to be awarded Forensic Technology's TRAX-HD3D BULLETRAX system by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). The BULLETRAX system is an automated system that captures high resolution 2D images and 3D topographic information of a bullet's lands and grooves for entry into the National Integrated Ballistic Information Network (NIBIN) system. The BULLETRAX system will expand and expedite LAPD forensic science services by enabling the imaging and correlation of bullets in a similar manner that cartridge cases are currently imaged in BRASSTRAX and correlated in the NIBIN system. Grant funds are being requested to fund overtime to prevent a significant increase in the FAU casework backlog due to the reassignment of FAU personnel to launch the BULLETRAX system and database, which needs to be validated before it can be fully implemented. Once the BULLETRAX system is fully implemented, grant funds will also provide overtime funding to enter bullet evidence from approximately 234 crimes and 1,200 test-fired samples from confiscated revolvers into the BULLETRAX database. Use of the BULLETRAX system will significantly speed up the analysis of bullet evidence. The FAU currently spends more than 3,000 staff hours per year on bullet microscopy and BULLETRAX has the potential to reduce that by fifty-percent or more. The BULLETRAX system will provide the LAPD and our law enforcement partners in other agencies throughout the Southern California region with the ability to

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develop a ballistic database that will quickly and efficiently compare the characteristics of bullets entered into the NIBIN network.

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**FY14 Recipient Name:** Governor's Office of Emergency Services

**Award Number:** 2014-CD-BX-0009

**Award Amount:** \$ 858,467

**Abstract:** FORMULA - There are many challenges facing California's forensic laboratories today – the transferring of inmates from the state system to each county via Assembly Bill 109, budget cuts, and the turnover of qualified personnel to cover core components of forensic analysis, to name a few – and each have negatively impacted local forensic science laboratories, medical examiners' offices and coroners' offices around the state. The 2014 Paul Coverdell Forensic Sciences Improvement Grant addressed by this application is a comprehensive forensic science improvement program that affords qualifying forensic laboratories in California an opportunity to improve on their efficiency and effectiveness to provide forensic science services. Through the improvement of the quality and timeliness of forensic services, the reduction of the number of backlogged cases, and the sustained education and training of forensic personnel, California's local forensic science laboratories, medical examiners' offices and coroners' offices will continue to provide a valuable tool to law enforcement and prosecutorial agencies throughout the state. As each California crime laboratory, medical examiners' office and coroners' office is unique, Cal OES will utilize the 2014 Paul Coverdell Forensic Sciences Improvement Grant funding to support an innovative statewide program – the California Coverdell Program – that allows qualified forensic laboratories the flexibility to use a combination of any or all of the aforementioned objectives to fund projects that meet the overall state goal and federal intent of the program.

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**FY14 Recipient Name:** Division of Criminal Justice

**Award Number:** 2014-CD-BX-0041

**Award Amount:** \$117,987

**Abstract:** FORMULA – Colorado's first and primary objective for these funds is to assist laboratories in their efforts to improve current operations in the quality and/or timeliness of forensic science services provided throughout the state. These funds will specifically support one state agency, the Colorado Bureau of Investigation; and three units of local government, the City of Denver, Denver Police Department, Crime Laboratory Bureau, the City of Colorado Springs, Metro Crime Laboratory, and the Northern Colorado Regional Forensic Laboratory. The Colorado Bureau of Investigation (CBI) is requesting Coverdell base funds for the following objectives: 1) Provide a mandatory level of training and conference events. 2) Reduce CBI's DNA testing backlog by providing overtime to DNA Scientists for DNA testing. 3) Improve the CBI quality management system by providing proficiency testing to CBI forensic staff. The Denver Police Department (DPD), Crime Laboratory Bureau is requesting Coverdell base funds for the following objectives: 1) Maintain ISO 17025 Accreditation by funding an external FQS Audit. 2) Provide training to DPD Forensic Laboratory staff in support of continued accreditation efforts. The Colorado Springs Police Department, Metro Crime Laboratory (MCL) is requesting Coverdell Base funds for travel and training to improve the quality and professionalism of the MCL staff. The Northern Colorado Regional Forensic Laboratory (NCRFL) is requesting Coverdell base funds to ensure continued ISO 17025 accreditation efforts by providing a mandatory level of training to staff as prescribed in each discipline, as well as training needed for certification or re-certification.

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**FY14 Recipient Name:** Department of Emergency Services and Public Protection

**Award Number:** 2014-CD-BX-0035

**Award Amount:** \$183,390

**Abstract:** FORMULA/COMPETITIVE – Formula: Problem to be addressed and target area and population - The Division of Scientific Services assists numerous agencies: 170 local police departments, 11 state police troops and specialized investigative units, and 189 fire departments and fire marshal's offices, state's attorneys, public defenders, and other State agencies. In addition, we serve other Federal, State, and local law enforcement agencies in Connecticut, the New England area, and around the U.S. We also provide technical support and documentation for crime scene services. The target population will be the State of Connecticut. Project goals and objectives and expected outcomes and major deliverables - Connecticut has determined that the best and most effective use of the 2014 Coverdell grant is professional development activities (travel and registration costs for training and conferences), JusticeTrax Laboratory Management System (LIMS), books/journals to fill our library, subscriptions to professional journals and publications, and annual dues, fees, memberships, and certifications. These activities will support improvement in the quality and timeliness of forensic analysis at the Division of Scientific Services. Activities will support compliance with American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB) International standards in the area of professional development (training and conferences); continued professional development of staff beyond the required in-house competency training and annual proficiency testing, consistent with its quality manual; enhancement of staff scientific skills; increase in case analysis and decrease in the turnaround time on a case through upgraded technology; increase in time law enforcement agencies and State's Attorneys receive results; use of statistical data tracking for all results in the DNA and Forensic Biology Sections to provide timely investigative information to law enforcement; and promotion of leadership, professionalism, competency, and education and encouragement of collaboration in the forensic sciences through books/journals, subscriptions, and annual dues and memberships. Project strategy or overall program - The Department of Emergency Services and Public Protection's Division of Scientific Services will use grant funds to support compliance with American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB) International standards in the area of professional development (training and conferences). Funds will also be used to upgrade the JusticeTrax LIMS hardware and software to allow a Web-based operation. Funds will support books/journals, subscriptions to professional journals and publications, and annual dues, fees, memberships, and certifications in professional organizations. Significant partnerships - The Division of Scientific Services will have no formal partnerships in delivery of services under this grant-funded project.

Competitive: Problem and target area and population - The problem to be addressed is the backlog in the Multimedia and Image Enhancement unit of the Division. The backlog fluctuates between 20 and 40 cases per month. Contributing to the backlog are submissions of surveillance video equipment collected by investigative personnel and the "rush" nature of this evidence. Often the submitting agencies are unfamiliar with the equipment they are seizing and the additional required items needed. Investigators are frequently challenged with the proper methods of preserving the sensitive data seized. Staff are frequently faced with the victims' reluctance to part with their video surveillance equipment because of liability and vulnerability issues. These cases are submitted directly to the Division of Scientific Services with a "rush" priority. The rush requests become extremely disruptive to the efficient flow of the laboratory. This compounds the effect on the existing backlog. The target area for mobile recovery efforts will be the state

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of Connecticut. The target population will be state, local, and Federal law enforcement and crime victims. Project goals and objectives and expected outcomes/major deliverables - Budgeted items will equip a video retrieval vehicle. Mobile video retrieval will provide a more efficient way to retrieve video evidence, decrease the time spent at the crime scenes, and reduce the number of video submissions. This timely retrieval will also ensure that the investigation moves forward appropriately. In addition, this will in turn allow more time for the forensic science examiners to work on reducing the Multimedia and Image Enhancement unit backlog. Using our new Next Generation Identification software for facial recognition, we can search facial features of persons of interest at the crime scene. Project strategy or overall program - We have a vehicle that will be assigned for mobile video retrieval. Since we do not have to purchase a vehicle, using grant funds provides a cost-effective way of using existing resources to conserve costs. We will use grant funds to equip this dedicated vehicle. This will provide a more efficient way to retrieve video evidence, efficiently and effectively conduct video retrieval and image enhancement, and communicate results to investigators without the need to submit evidence to the laboratory. This will greatly reduce the number of video submissions and more time can be spent on the backlog of cases. Significant partnerships - The Division of Scientific Services will have no formal partnerships in delivery of services under this grant-funded project.

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**FY14 Recipient Name:** District of Columbia Government

**Award Number:** 2014-CD-BX-0040

**Award Amount:** \$63,029

**Abstract:** FORMULA – The District of Columbia Department of Forensic Sciences (DFS) is the agency tasked with forensic science laboratory services, crime scene sciences, and public health laboratory services in the District of Columbia. The District of Columbia Office of the Chief Medical Examiner (OCME) is tasked with the detection, identification, and quantitation of alcohol, drugs, and other toxins in biological specimens for ante mortem and postmortem cases through the Forensic Toxicology Laboratory (FTL) Division. Both the DFS and OCME are responsible for the analysis of evidentiary items that are submitted by the Metropolitan Police Department (MPD) and collected during a sexual assault exam conducted by a sexual assault nurse examiner (SANE) in the District of Columbia. The DFS and OCME have experienced an increase in submissions for sexual assault casework. Despite best efforts to manage the rising demand, the backlogs and turnaround time in both the FBU and FTL are increasing. The funding request is for one (1) full-time DNA Analyst and (1) full-time Forensic Toxicologist to support existing staff in providing DNA examination and toxicological screening of MPD-submitted evidence collected during sexual assault examinations in order to reduce turnaround time and case backlog for suspected sexual assault cases. In addition to the DNA Analyst and Forensic Toxicologist working in their respective agencies, this project will allow for the collaboration between the DFS and OCME on suspected drug facilitated sexual assault (DFSA) cases. Through collaboration, the DFS and OCME can review and compare suspected DFSA case results in an effort to identify patterns and trends of DFSA cases. By identifying patterns and trends, the DFS and OCME can provide enhanced data to the criminal justice stakeholders throughout the District of Columbia.

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**FY14 Recipient Name:** Executive Office of the Governor of DE

**Award Number:** 2014-CD-BX-0044

**Award Amount:** \$63,029

**Abstract:** FORMULA – The Criminal Justice Council (CJC) is the applicant/fiscal agent for these funds and proposes to utilize the formula grant funding of \$63,000 for FY14 to fund an as of yet unidentified agency to provide services in conjunction with the intent of the Coverdell funds. A request for proposals (RFP) will be written and distributed throughout the state through the various CJC listservs and the agency website to ensure thorough dissemination of this funding opportunity. The entirety (100%) of grant funds will be sub-awarded to provide services intended to: improve the quality and timeliness of forensic science and medical examiner services, eliminate backlogs in the analysis of general forensic evidence and/or train and employ forensic laboratory personnel to eliminate backlogs for a period of one year. Due to the amount of funds available, the CJC has prioritized that funds be used for the elimination of backlogs, personnel, laboratory equipment, computerization and training. Funds will not be used for the renovation or construction of any facilities. At this time, there is one state Office of the Chief Medical Examiner (OCME). For this reason it is inundated with cases and some agencies are beginning to contract with outside agencies for forensic analysis. Although the OCME maintains responsibility for entering cases into CODIS, the actual analysis is being contracted elsewhere. Based on preliminary information gathering, if the funds received are not sub-awarded to the OCME, they will most likely going to a state or local law enforcement agency. Until proposals are received by the Criminal Justice Council, it cannot be stated with certain who will be sub-awarded these grant funds.

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**FY14 Recipient Name:** Florida Department of Law Enforcement

**Award Number:** 2014-CD-BX-0054

**Award Amount:** \$437,892

**Abstract:** FORMULA – Florida is the nation's fourth most populous state; and with more than 87 million annual visitors, it is one of the top tourist destinations in the world. According to Uniform Crime Report statistics, the approximately 500 Florida criminal justice agencies throughout the state reported 725,944 index crimes in 2012, a decrease of 5.6% from 2011. Despite the decrease, Florida's reported crime volume for 2012 surpassed that of all states except California and Texas. Requests for forensic services are handled by six Florida Department of Law Enforcement (FDLE) regional crime laboratories, and five county laboratories (Miami-Dade, Broward, Palm Beach, Pinellas, and Indian River) that are part of Florida's crime laboratory system. Florida's State Fire Marshal handles arson investigations, and death investigations are handled by one of 24 district medical examiners who are governed by the Florida Medical Examiners Commission (MEC). FDLE serves as staff for the MEC. FDLE will submit the application for the Paul Coverdell Forensic Science Improvement Grant formula funds on behalf of all agency members of Florida's crime laboratory system, State Fire Marshal and MEC. These partners have agreed to a distribution methodology that provides a base amount of funding to Florida's Medical Examiners, with the remaining funds to be distributed to the state and local crime laboratories on the basis of population served. Although better case management, streamlined processing, and increased case work capacity have helped laboratories increase output and reduce backlogs in some disciplines, and slow the growth of backlogs in others, large numbers of pending cases remain throughout the state laboratory system. Medical examiners are facing the challenge of providing timely services to meet the increasing volume of service requests within their respective districts due to outdated technology and limited

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resources. Through self-assessment, the state and local laboratories and medical examiner offices have identified and prioritized their agencies' needs, and are requesting Coverdell funds for temporary personnel, overtime, equipment, training, supplies and contract services to improve the quality and timeliness of forensic and medical examiner services throughout the State. **PROJECT GOALS AND OBJECTIVES:** 1. Reduce analysis time for cases submitted to state and county crime laboratories; 2. Reduce backlogs in the analysis of non-biology forensic science evidence; 3. Improve timeliness of medical examiner services throughout Florida; and 4. Train forensic laboratory and medical examiner personnel to improve quality and timeliness of services and eliminate case backlogs.

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**FY14 Recipient Name:** Miami Dade County

**Award Number:** 2014-CD-BX-0028

**Award Amount:** \$174,634

**Abstract:** COMPETITIVE – A highly challenging and complex problem confronting postmortem forensic toxicology laboratories is the detection of a growing assortment of drugs and toxic substances in blood and tissue samples from decedents. For both the laboratory and the investigating medical examiner, its detection must occur early in the testing process to better understand the nature of the case and course of additional testing. Initial screening tests dictate how a case will proceed, what tests will follow, and how long it will take to complete. Screening procedures must be thorough and comprehensive while being able to meet reasonable turn-around time expectations. The Miami-Dade County Medical Examiner Department is requesting grant funding to purchase an automated gas chromatograph mass spectrometer (GCMS) capable of fast analyses with spectral deconvolution software to replace antiquated technology currently used by the toxicologists. This new instrument will significantly improve processing and turnaround time of medical examiner services and eliminate an unreasonable backlog of toxicology cases that buildup each week. The increasing demand placed on the toxicology laboratory (“Laboratory”) each week is overwhelming due to the number of cases involving drugs requiring a comprehensive screen. Approximately 72% of all cases processed require blood screening that takes on average 95 minutes of instrument and data processing time to complete. The technology will reduce the processing time by 79% and ultimately reduce the turnaround time by 75% on medical examiner cases to a more reasonable 30-45 days. The GCMS technology will achieve the following program objectives: • Reduce instrument runtime for a single blood drug screen from 95 to 10 minutes • Reduce data processing time from 30 to 10 minutes • Reduce overall processing time for a single blood drug screen from 95 to 20 minutes • Reduce turnaround time for a single case involving a blood drug screen from 65-75 days to 30-45 days. The following project outcomes will be tracked as performance measures: (1) improved throughput and reduced turnaround time for blood screens; (2) improved excellence in the quality of the results; and (3) decreased costs in maintenance and materials. The new GCMS system has increased temperature programming ramp rates with additional electronic pressure controlled gas flows to reduce the chromatographic runtime from 45 to 10 minutes. The instrument incorporates both a nitrogen specific detector and mass spectrometer that allows analysis to be performed on one instrument, rather than three separate instruments. Technology features such as inlet back-flushing and a new ion source design will reduce or eliminate the maintenance that typically consumes instrument preparation time prior to analysis.

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**FY14 Recipient Name:** Pinellas County

**Award Number:** 2014-CD-BX-0007

**Award Amount:** \$79,340

**Abstract:** COMPETITIVE – Pinellas County, is Florida’s most densely populated county. Home to 926,610 permanent residents and comprised of 24 municipalities, Pinellas County is also a popular tourist destination. The Pinellas County Sheriff’s Office (PCSO) is the County’s largest law enforcement agency and provides primary law enforcement services to the unincorporated area and 13 municipalities that contract for services. The Forensic Sciences Division (FSD) provides forensic science services for PCSO and 8 of 10 municipal police departments located in Pinellas County. Additionally, the FSD is proud to be the lead forensic team for Region 4 of the Regional Domestic Security Task Force. In 2013, the FSD provided evidence recovery services for 5,471 cases. One case may result in recovery of numerous items of evidence. In nearly half of the cases worked, Forensic Science Specialists developed latent fingerprints. These developed prints, along with elimination prints, are forwarded to PCSO’s Automated Fingerprint Identification Systems (AFIS) Division in an effort to make a positive fingerprint identification. With FY 2012 Coverdell funds, the AFIS Division was able to acquire a FOCOS2 Dual Camera Forensic Optical Comparator/Examination Station. This equipment allows for 1000 ppi image capture, ideal resolution for AFIS submission. Additionally, the 1000 ppi resolution allows for greater clarity in comparing level 3 details of latent fingerprints, some of which include pores, edges, creases and deformations. It is PCSO’s intent to bring equipment to FSD equal to the caliber of the FOCOS2 with the Forensic Science Enhancement Project. The goal of this project is to increase the quality of latent fingerprint evidence, provide a non-destructive method for processing this evidence at 1000 ppi, and permit the concentration of efforts on items of further evidentiary value. Like many law enforcement agencies across the country, PCSO has had to reduce the general fund budget by over \$100 million during the past 5 years. This reduction was due in large part to the more than 600 positions eliminated. Given the General Fund has yet to stabilize, the PCSO is seeking FY 2014 Coverdell funds to purchase equipment for the FSD that incorporates RUVIS technology and full spectrum imaging capabilities that will complement the 1000 ppi of the FOCOS2 for identification analysis. The Project Manager will track the number of Forensic Specialists trained on the new equipment, the number of cases for which the new equipment was used, the number of latent prints developed and the number of positive identifications made.

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**FY14 Recipient Name:** Sarasota County Sheriff’s Office

**Award Number:** 2014-CD-BX-0006

**Award Amount:** \$53,740

**Abstract:** COMPETITIVE – The Sarasota County Sheriffs Office is seeking funds through the Paul Coverdell Forensic Science Improvement Grant Program to provide resources to accredit the Drug Lab and Crime Scene Sections of the Forensic Unit. Due to budget constraints and a deficiency in manpower resources, the funds will support the contracting with a mentoring agency for the grant period and the necessary fees associated with the accreditation process. The contract representative will be hired through Ron Smith and Associates. Accreditation to ISO 17025 compliance will be sought through the American Society of Crime Laboratory Directors - Laboratory Accreditation Board (ASCLD-LAB). The objective of the project is to improve the quality of examinations conducted in these two sections which will provide the submitting agencies and courts with a seal of quality for crime scene response and lab processed evidence. Working through the accreditation process will also enable us to improve the

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timeliness of processing evidence as well as correct any deficiencies in safety practices. Accreditation will begin with RS&A providing a quality manager for the two sections. This person will audit the sections to look at what standard operating protocols are in place, assess the infrastructure and safety practices, assist with the writing of new protocols and devise a time line to implement a new quality system prior to applying for accreditation. With only one supervisor overseeing the two sections, it is necessary to have some assistance and expertise to complete the tasks needed for accreditation. Funds will be used to hire RS&A to mentor, advice and assess the Forensic Unit during the project funded year. This person will work in conjunction with the Forensic Unit Supervisor to manage the steps required in the accreditation process. All other costs for ASCLD-LAB associated with getting accredited will be paid for using Coverdell funds. Performance measures for this project are primarily based on improving the timeliness and quality of forensic services provided to the Sheriffs Office and neighboring agencies. The outcome will be the Forensic Unit becoming ISO 17025 compliant through ASCLD-LAB at the end of the grant period.

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**FY14 Recipient Name:** Georgia Criminal Justice Coordinating Council

**Award Number:** 2014-CD-BX-0059

**Award Amount:** \$223,777

**Abstract:** FORMULA – The Criminal Justice Coordinating Council submits this application on behalf of its partner state agency, the Georgia Bureau of Investigation (GBI). GBI's Division of Forensic Sciences (Crime Lab) operates 7 laboratories located throughout the state. The laboratory system serves the entire state, which has a population of approximately 9.8 million; the Crime Lab also issues reports to approximately 1,000 criminal justice agencies. Through this grant, the Crime Lab proposes to use funding from this award to assist in the outsourcing of toxicology analyses needed by the GBI Medical Examiner. This short term outsourcing will facilitate backlog reduction efforts within the GBI Toxicology unit by diverting a number of cases that would otherwise have been analyzed internally. This approach supports the attainment of the goals stated in the Crime Lab's 2012 Strategic Plan. The Strategic Plan outlines the Crime Lab's commitment to: • Enhance and improve the workplace environment to be more conducive to the recruitment and development of Crime Lab employees; • Foster an organizational culture focused on the quality and integrity of forensic analysis; • Analyze incoming evidence submissions in a time frame necessary to meet investigative needs and the requirements of court presentation; and • Expand the lines of communication between laboratory staff, customers and stakeholders.

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**FY14 Recipient Name:** Guam Bureau of Statistics and Plans

**Award Number:** 2014-CD-BX-0033

**Award Amount:** \$63,029

**Abstract:** FORMULA – Program Scope and Objectives: The scope of this proposal is to eliminate the backlog in the analysis of controlled substances in the Guam Police Department Forensic Science Division Drug Unit. The objectives is to continue to provide support for one Criminalist I position for the Drug Unit and forensic supplies to process forensic drug evidence. Program Design and Methodology To meet the scope and objectives, the grant will continue to provide personnel and fringe benefits for one Criminalist I position in the Drug Unit and to use grant funds to purchase ultra pure helium gas to be used

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to process forensic drug evidence. The Criminalist I position and forensic supplies is of critical importance to ensure the processing of current and backlog controlled substances evidence in the Drug Unit. This Criminalist I will assist the senior Criminalist III in conducting analysis of controlled substances of current and backlog forensic drug cases. Meeting this objective and the scope of this proposal will increase the Drug Unit evidence screening and processing of current and backlog forensic drug cases. The program evaluation criteria will consist of the successful implementation of the Criminalist I and the successful implementation of the ultra pure helium gas. The program outcomes and effectiveness of the project will be based on the efficiencies that the Forensic Science Division will experience with the additional Criminalist in the Drug Unit and the forensic supplies. The anticipated outcome of this program is the reduction in the backlog of forensic drug cases.

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**FY14 Recipient Name:** Hawaii Department of the Attorney General

**Award Number:** 2014-CD-BX-0030

**Award Amount:** \$63,029

**Abstract:** FORMULA – The Department of the Attorney General, the designated State Administering Agency (SAA), is seeking State formula (base) funding through the 2014 Paul Coverdell Forensic Science Improvement Grants Program (Coverdell) to improve and enhance the quality and timeliness of forensic science services in Hawaii. The Department of Attorney General is requesting \$34,540 to support the Department of Public Safety Narcotics Enforcement Division Forensic Lab (NEDFL). Thirty-one thousand and eighty-six dollars (\$31,086.00) will be utilized to support the Hawaii Department of Public Safety, Narcotics Enforcement Division Forensic Lab (NEDFL). NEDFL plays an essential role in combating drug crimes by providing forensic analysis, services, training and expert testimony for NED and other State, County and Federal law enforcement agencies. NEDFL seeks funding to further develop its latent print processing program implemented in 2013. Among the issues identified is the need for enhanced documentation of latent prints by digital photography. Good documentation of latent prints can result in a greater number of identifications made and crimes solved. The goal of this project is to improve and enhance the quality of forensic services provided by NED FL. The three objectives are as follows: (1) to maintain laboratory accreditation; (2) to fulfill NEDFL's commitment to laboratory personnel professional development by providing training opportunities to maintain their forensic knowledge, abilities, and credibility and thereby also maintaining their professional certification in forensics; and (3) to improve and enhance the latent print processing discipline by providing and hosting a latent print documentation training that will benefit Hawaii's law enforcement and forensic community. Three thousand four hundred fifty-four dollars (\$3,454) will be utilized to support administrative costs for the Department of the Attorney General as the SAA. Funds will support a portion of the salary and associated fringe benefits cost for the staff responsible for overseeing the Coverdell funded contract.

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**FY14 Recipient Name:** Iowa Governors Office of Drug Control Policy

**Award Number:** 2014-CD-BX-0036

**Award Amount:** \$69,211

**Abstract:** FORMULA – Problem: The Coverdell Grant program provides funding to accredited crime labs and medical examiners in Iowa. Funding will be used to help improve the quality and timeliness of forensic science and medical examiner services. Funding will assist in the elimination of backlogs in the

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analysis of forensic evidence, train staff, and to provide equipment enhancements. Project Goal: Iowa Criminalistics Laboratory, Decrease casework backlogs and average turnaround times on processed evidence to meet 45 day speedy trial court requirements: Iowa State Medical Examiner, Meet national standards for death scene investigations. Maintain knowledge and education of state medical Examiner Forensic Pathologists, Death Investigators, and other staff on the latest research and advancements. Programs To Be Funded: Funding is requested to support the Iowa Department of Public Safety, Division of Criminal Investigation, Crime Laboratory and the Department of Public Health, State Medical Examiner's Office. The 2014 Base Award will be utilized by the Iowa Department of Public Safety, Division of Criminal Investigations, Criminalistics Laboratory to provide overtime for criminalists and evidence technicians to clear cases and reduce case turnaround time. The Crime Lab will also utilize funding to manage digital images. Iowa Department of Public Health, Iowa State Medical Examiner: The 2014 Base Award will be utilized by the Iowa Department of Public Health to train local medical death investigators and to continue Iowa medical examiner pathologist education and training. The funding will also be utilized to purchase a digital SLR camera for use in documenting cases. Major Deliverables (Objectives): Overtime support for criminalists and evidence technicians to reduce case turnaround time. Purchase, install, and train staff on a digital image management system which will be integrate into the lab's existing management system. Train local death investigators and Iowa Medical Examiner Pathologists.

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**FY14 Recipient Name:** Idaho State Police

**Award Number:** 2014-CD-BX-0056

**Award Amount:** \$63,029

**Abstract:** FORMULA – INCREASED EFFICIENCY AND TIMELINESS THROUGH LIMS

IMPLEMENTATION, Project Scope and Objectives: The scope of this project is to improve the quality and timeliness of forensic services in Idaho and to reduce the number of backlogged cases in the Idaho State Police Forensic Services laboratories. The objectives of this project are to: 1. Improve the quality and timeliness of casework and decrease backlogs in all laboratory disciplines by fully implementing and custom programming the new ISPFS Laboratory Information Management System (LIMS). Project Design and Methodology, Objective 1 is accomplished by funding a LIMS computer programmer salary (full-time implementation expert) for a period of 1143.488 hours. ISPFS purchased a new LIMS system using 2010 Coverdell funds. ISPFS suspended many laboratory process improvement efforts to decrease backlogs and increase efficiencies in all forensic disciplines pending the implementation of the new LIMS system. The procurement process for the new LIMS was long, and the system went live in October 2013. ISPFS does not have funds to pay the LIMS vendor for continuing maintenance of this software, so ISPFS negotiated access to the source code of the software to perform ongoing maintenance using "in-house" ISP computer programmers. ISPFS has used funds from the Coverdell 2010, 2012 grants and will use funds from the 2013 grant to pay the salary of the implementation programmer. Additional funds are necessary to retain this position until the Idaho legislature appropriates permanent funding for the position. The programmer will be responsible to get the LIMS system operational and through validation, the data converted from the old system, and the system adapted to the ISPFS work flow. In addition to working with the vendor on initial deployment of the system, the programmer will be the LIMS administrator, will interface the system with laboratory instruments, and will write quality control modules. Once the LIMS system is fully functional and debugged, the programmer will be used to

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develop a paperless LIMS environment, repair computers (such as instrument computers) that are not supported by the ISP Information Technology (IT) staff, and coordinate with ISP IT to resolve laboratory computer and network related problems. The small ISP IT staff is overwhelmed with requests from the entire department and cannot provide the level of support that Forensic Services needs with the new integrated LIMS system. The LIMS programmer will decrease backlogs, speed turnaround, and increase quality by customizing the system for process efficiency.

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**FY14 Recipient Name:** City of Chicago

**Award Number:** 2014-CD-BX-0027

**Award Amount:** \$160,325

**Abstract:** COMPETITIVE – Although Chicago reduced UCR Part 1 Violent Crime incidents by 13% in 2013, over 20,000 violent crimes and over 46,000 property crimes recorded in 2013 placed a huge investigative burden on the Chicago Police Department (CPD) even as the number of CPD officers engaged in forensic investigations (e.g. crime scene investigators; forensic technicians; detectives) has decreased over the last several years as a local consequence of the national recession. This, as well as our continuing need to investigate and "clear" investigations and prevent more crime by interrupting crime patterns, has led to ongoing CPD efforts to operate more efficiently, effectively and "smarter", in part through our purchase and deployment of advanced technologies in all aspects of policing. In 2013, CPD Forensic Services Division records show that Crime Scene Investigators processed approximately half of all crime scenes, including more 3,000 firearm incidents, 80 police-involved shootings, 600 morgue cases and more than a thousand robbery cases. CPD Crime Lab personnel received (either from CPD Evidence Technicians, Patrol Districts, Detective Areas, or other law enforcement agencies) evidence from 28,000 forensic cases, processed 8,000 firearms, printed close to 300,000 photographic images of forensic evidence, evaluated nearly 18,000 cases for latent prints and other physical evidence, and tested more than 49,000 cases for narcotics. Throughout this forensic investigative activity, CPD's reliance upon sometimes outdated and worn-out field and laboratory equipment led to evidence processing backlogs and delays, and to missed opportunities to identify and document the probative evidence needed to clear cases. The CPD is responding to these investigative issues and needs by requesting FY 2014 Paul Coverdell Forensic Science Improvement Grant funding to provide 1) new laboratory technologies for the CPD Forensic Services Division (i.e. portable trace evidence recovery laser system; Reflective Ultraviolet Imaging System Lab Workstation; Alternate Lighting Source (ALS) devices for field and laboratory use) and 2) by replacing obsolete and worn-out full-frame digital cameras and flash units used by crime scene investigators. Purchase of these technologies will produce the following measurable outcomes: reduced case evidence processing backlogs; reduced evidence processing delays; more usable investigative leads from processed evidence will be developed; improved forensic quality of processed case evidence; improved quality of digital photographic images; increased recovery of transient evidence from crime scenes; and increased identification of latent prints recovered from processed crime scene evidence.

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**FY14 Recipient Name:** Illinois Criminal Justice Information Authority

**Award Number:** 2014-CD-BX-0032

**Award Amount:** \$288,499

**Abstract:** FORMULA – This proposal is submitted on behalf of the forensic science laboratories in the State of Illinois. The laboratories represented in this proposal are the nine forensic science laboratories that comprise the Illinois State Police (ISP) Division of Forensic Sciences Command (FSC), the DuPage County Forensic Science and the Northern Illinois Regional Crime Laboratory (NIRCL). The state plan for the forensic science laboratories in Illinois has focused on improving the quality, accuracy and timeliness of forensic sciences services to the criminal justice system and citizens of the State of Illinois. The consolidated plan has been in effect since 2002 and the continued demand for forensic sciences services dictates the need for the forensic science laboratories in Illinois to continue focusing their efforts and resources on improving the quality of forensic science services. Funding from previous years' National Forensic Sciences Improvement Act programs have been used to purchase new analytical equipment and/or upgrades for existing analytical equipment; to maintain laboratory accreditation standards by purchasing required external proficiency test; and to provide appropriate internal and external training opportunities to staff that assists with the end goal of improving the timeliness and quality of forensic services offered by the forensic sciences laboratories in Illinois. The aforementioned actions have had a positive impact on the labs' ability to address case backlogs, maintain required accreditation standards and improve forensic services.

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**FY14 Recipient Name:** City of Fort Wayne

**Award Number:** 2014-CD-BX-0072

**Award Amount:** \$68,500

**Abstract:** COMPETITIVE – Fort Wayne is the county seat in Allen County Indiana, lying approximately halfway between Indianapolis, IN and Detroit, MI. With a 2012 population of 254,555, it ranks as the state's 2nd most populous municipality and 74th most populous in the United States. The Fort Wayne's Police Department (FWPD) was established in 1863 with just three officers and today the department's 429 sworn officers cover 110 square miles of land, 1,280 miles of streets and highways, handling 40.71 (3.63 violent/37.08 property) crimes per 1,000 residents each year. The FWPD digital forensics lab employs three detectives and operates two shifts to process all digital evidence from our department and routinely assist local law enforcement agencies in our 11-county region as well as the federal agencies FBI, US Attorney General's Office and DEA. Because of the exponential growth in use, size, and capabilities of digital information in all aspects of life including criminal activity, our forensic lab is challenged to meet increasing demands to process valuable evidence and has a backlog of more than 250 cases-local and federal. This is compounded by a record number of violent crimes including 2013's record 44 homicides, the creation of an active gang/violent crime unit and increased collaboration with FBI Safe Streets Task Force that has drastically increased workload. Despite a tripling of staff, limited financial resources caused by Indiana's property tax restructuring prevents the acquisition of tools necessary to reduce backlog and increase timeliness and quality of processing. The City of Fort Wayne recognizes three areas of vulnerability and shortfall currently impacting our increasing digital forensic backlog: Laboratory equipment/software is severely outdated, inefficient, and unsuitable to current forensic needs; forensic detectives are not uniformly or sufficiently trained on methodologies, equipment;

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insufficient and overcrowded laboratory space is inadequate for needs. We request funding to address each area with a cost effective and targeted approach to provide means for our committed and capable staff to implement a detailed plan to meet the strategies and goals set forth in this grant application. The plan is, on surface, simple: acquire critical equipment, adequately train staff and modestly alter facilities to accommodate needed work. But the plan addresses each detail and need optimally while balancing cost. The far reaching impact of these simple steps is immense. Further, the FWPD shares costs where possible and commits to a comprehensive design to measure impacts and outcomes to meet project goals and measurements.

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**FY14 Recipient Name:** Indiana Criminal Justice Institute

**Award Number:** 2014-CD-BX-0065

**Award Amount:** \$147,157

**Abstract:** FORMULA – Goals: The State plan is to attain a turnaround time of less than 45 days for 90% of submissions, reduce backlogs, and improve the quality of forensic services. Objectives: 1. To improve the timeliness of forensic services and reduce backlogs through the use of overtime pay 2. To improve the quality and timeliness of forensic analysis through equipment upgrades Project plans: 1. Utilize paid overtime to improve turnaround time and reduce backlogs 2. Procure, install, and validate upgraded equipment Methods: 1. To improve timeliness of forensic services and reduce backlogs, paid overtime will be used for forensic analysis and associated tasks. 2. To improve quality and turnaround time in the Forensic Document Unit, an X-Y translation stage and document centering device will be purchased. 3. To improve quality and turnaround time in the Firearms Unit, digital calipers and a stainless steel ballistic box (cotton trap) will be replaced. 4. To improve quality and turnaround time in the Latent Print Unit; two superglue chambers, the footwear library, and one digital camera and lens will be replaced. 5. To improve quality and turnaround time in the Drug Unit, a Fourier Transform Infrared Spectrophotometer will be replaced.

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**FY14 Recipient Name:** Executive Office of the State of Kansas

**Award Number:** 2014-CD-BX-0060

**Award Amount:** \$64,811

**Abstract:** FORMULA – In a May 2010 National Academy of Science report, it was cited that the quality of practice in forensic disciplines varies widely and the conclusions reached by forensic practitioners are not always reliable. The report also stated that a contributing factor is a gross shortage of adequate training and continuing education. Additionally, the Kansas Bureau of Investigation (KBI) has hired more than 15 new forensic scientists in the past 18 to 24 months, increasing the importance and need for specialized forensic sciences training. Under a previous Coverdell grant award, the Sedgwick County Regional Forensic Science Center (SCRFSC) purchased a liquid chromatograph/mass spectrometer (LC/MS). This instrumentation requires routine preventative maintenance and a service contract in the event of component failure that is outside the capabilities of the scientific staff and must be provided by professional engineers. The SCRFSC requests to use Coverdell to fund the cost of the preventative maintenance and service contract for one year so that the LC/MS will remain operational. In addition, the SCRFSC has identified an inefficiency in the analysis of toxicological evidence that can be improved through the purchase of an additional zero-air generator, allowing simultaneous use of

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all four instruments connected to the unit. The Johnson County Crime Lab has identified improvements that can be achieved through the purchase of a portable Faraday tent for the Digital Multimedia Evidence section (DME). The equipment will improve the efficiency and effectiveness of forensic DME examinations by blocking electronic devices from accessing active wireless networks preventing destruction and/or alterations of evidence. **Project Goals:** The goals of the Coverdell grant project are to: Goal 1 – Obtain a portable Faraday tent and a zero-air generator; Goal 2 – Maintain service contract and preventative maintenance program for a LC/MS; and Goal 3 – Train forensic scientists and offer continuing education hours for certification. **Strategies, Partnerships and Anticipated Outcomes:** Through the purchase and maintenance of equipment and provision of training opportunities for forensic scientists, the Coverdell grant will: ✓ Reduce the risk of evidence alteration/destruction; ✓ Increase the efficiency of casework analyses; ✓ Increase job knowledge and efficiency of forensic scientists; ✓ Expose scientists to experts in their respective fields not available in KBI laboratory; and ✓ Expose scientists to new technology and integrate that information into current procedures.

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**FY14 Recipient Name:** City of Covington

**Award Number:** 2014-CD-BX-0071

**Award Amount:** \$7,900

**Abstract:** COMPETITIVE – The Covington Police Department maintains a forensic laboratory to support our city of approximately 40,000. Our region, Northern Kentucky, just South of Cincinnati, includes another 34 criminal justice agencies. Regionally, we're the largest police agency with the largest dedicated staff of evidence technicians outside of the Kentucky State Police (KSP). We staff our lab 7am-8pm, providing on-call coverage 24/7. This is greater than what KSP offers, 20-97 miles away with restricted hours. Our technicians routinely analyze evidence on violent felonies. We maintain more extensive equipment than other local agencies. Our assistance can be requested by other jurisdictions at all hours on all days. Covington is the only agency with 24 hour (on-call) access to latent print processing and an AFIS workstation for major investigations. The most frequently sought service is latent fingerprint processing and access to our Remote AFIS Workstation. In addition to the local Kentucky agencies, we assist the Eastern District Federal Prosecutors and nearby Ohio agencies seeking fingerprint exemplars through AFIS. In 2013 we used an unexpected windfall of forfeiture funds to replace an inoperable workstation after failing to obtain grant funding. We now seek to purchase a Cyanoacrylate processing chamber. Currently we process with cyanoacrylate in a glass aquarium. This is both unsafe and inefficient. All three of our technicians are trained in the use of professional fuming chambers. Over three years of budget cuts have reduced our civilian and sworn staff, failed to provide for improvements to our facilities and eliminated the lab's training budget. The economic down-turn and local heroin epidemic have increased our larcenies, street and violent crimes. One of the three lab technicians worked only 7 months of 2013 after FMLA leave and then resigning. We have replaced her and trained a new technician. However we must continue to meet court deadlines after the backlog the technician's absence created. Given our volume of work and inability to hire additional personnel, timeliness is becoming more essential. Our technicians and inadequate equipment are over-taxed. Achieving quality improvements will be obvious as proper cyanoacrylate equipment and latent print processing is an essential function of any modern lab in an urban environment. With these funds, we plan to increase our timeliness, the quality of our work and environment while continuing to assist other agencies to

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do the same. We value the intelligence sharing and regional professional status that our crime lab brings to our city and county.

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**FY14 Recipient Name:** Kentucky Justice and Public Safety Cabinet

**Award Number:** 2014-CD-BX-0034

**Award Amount:** \$98,434

**Abstract:** FORMULA – The Kentucky Office of the Medical Examiner, Kentucky State Police Forensic Laboratories, and Kentucky State Police Automated Fingerprint Identification System Unit request federal funds to improve both the quality of services provided to the Commonwealth of Kentucky, as well as decrease backlogs. The Kentucky State Police provide all of the forensic services to the entire Commonwealth. There are no other providers of forensic services to the criminal justice community in Kentucky and this responsibility is taken seriously by all involved. The Kentucky State Police Forensic Laboratories propose to utilize grant funds for costs associated with attending forensic conferences and training events to realize better testing quality and the implementation of best practices for improving turnaround times in case completion. The Kentucky State Police Latent Print Section also requests funding for a digital imaging system which will increase both the quality of and the efficiency of the analyses conducted. The Kentucky Office of the Medical Examiner proposes to fund Phase III of a statewide death case management system which will allow approximately 43 additional local county coroner's access to this web-based system. Kentucky is in dire need of a comprehensive method to manage data surrounding death investigations. Easy electronic access to these records is vital to collaboration, investigation, reporting, and testimony in individual cases. Access to a central data base will improve both the efficiency and efficacy of medical examiners' and coroners' record keeping and reporting in a time of severely limited budgets.

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**FY14 Recipient Name:** City of New Orleans

**Award Number:** 2014-CD-BX-0024

**Award Amount:** \$171,362

**Abstract:** COMPETITIVE – The City of New Orleans, with a population of 369,250, continues to work to establish a state-of-the-art crime laboratory within the New Orleans Police Department (NOPD) to support local law enforcement efforts to reduce violent crime. As with many metropolitan police department crime laboratories, the NOPD is challenged to provide needed services on a limited budget. Further compounding this challenge is the fact that the NOPD Crime Lab has yet to be completely re-established since the facility was flooded in 2005 in the aftermath of Hurricanes Katrina and Rita. The NOPD Scientific Criminal Investigations Section (SCIS) has been in a constant, post-Katrina rebuilding phase since May of 2010 with the election of Mayor Mitch Landrieu and appointment of Ronal Serpas as Superintendent. The crime laboratory has been reestablished in a new temporary location with plans for a new building in the development phase. It is estimated that the building will be completed in late 2016 or early 2017. A state-of-the-art Firearms Examination Unit now exists in the Crime Lab. Given the nature and number of gun-related crimes in New Orleans and the documentation required in the post-NCIS/CSI world, it is imperative that NOPD SCIS enhance its ability to document crime scenes differently. The purchase of modern 3D laser crime scene mapping systems available today would allow NOPD SCIS to have the detailed data required from crime

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scenes to allow Firearms Examiners, Fatality Accident Reconstructionists and, ultimately, the District Attorney to accurately present renderings of crime scenes and accidents in court and satisfy the judges' and juries' thirst for state-of-the-art modern technology they see on television and have come to expect. It is anticipated that Coverdell grant funds used to purchase this 3D laser crime scene mapping system will improve both the quality and timeliness of the NOPD SCIS1 forensic sciences services. With the equipment and training provided with this grant funding, the challenge to provide needed services on a limited budget with personnel reductions, particularly in the SCIS, NOPD will be positioned to get the most out of its scarce resources.

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**FY14 Recipient Name:** Louisiana Commission on Law Enforcement

**Award Number:** 2014-CD-BX-0011

**Award Amount:** \$103,589

**Abstract:** FORMULA – The proposed 2014 Paul Coverdell Forensic Sciences Improvement Grant Program award will be used by Louisiana to continue the work and success of previous years efforts and funding to accomplish the goal of improving the quality and timeliness of forensic science and medical examiner services, eliminating or reducing the backlog of analysis of forensic science evidence, and training of forensic science personnel in order to improve the quality and timeliness of these services. Louisiana proposes to accomplish this goal by the subawarding of 2014 grant monies to six local and regional forensic laboratories, one Coroner's Office and the State Police Crime Lab. These funds will be used for specific objectives supporting the above stated goal. Funds will be allocated for travel and training expenses, equipment and supply purchases and equipment maintenance agreements. Evidence of such activity will manifest itself through the use of quarterly fiscal expenditure reports and program progress reports as well as on-site monitoring visits of subawardees. This information will be presented in semiannual progress reports to NIJ. Performance metrics captured include: The average number of days to process a sample at the beginning and end of the grant period, the average number of backlogged cases at the beginning and end of the grant period and the number of forensic science and medical examiner personnel attending training programs. In addition, the Louisiana Coverdell program will continue to place a special emphasis on allegations of serious negligence or serious misconduct should any become known to the Louisiana Commission on Law Enforcement as well as follow-up on the status of the St. Tammany Parish Coroner. A mechanism currently exists for an external entity (Louisiana Dept. of Justice- Attorney General's Office), to investigate any such allegations.

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**FY14 Recipient Name:** City of Boston

**Award Number:** 2014-CD-BX-0019

**Award Amount:** \$175,000

**Abstract:** COMPETITIVE – The City of Boston/Boston Police Department (BPD) is seeking funding under the FY 2014 Paul Coverdell Forensic Science Improvement Competitive Grant Program to develop an Automated Fingerprint Identification System (AFIS) Section within the Latent Print Unit (LPU) of the BPD. The Boston Police Departments (BPD) Latent Print Unit (LPU), a part of the larger BPD Forensic Group, is responsible for evaluating items for latent prints, providing high-quality analyses and valuable information that may be used for successful

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prosecution in related cases. Using past Coverdell funds to achieve accreditation in 2009, the BPD's LPU remains committed to high quality and cutting edge forensic analysis. The newly developed AFIS Section will increase the number of cases that are currently searched, specifically targeting breaking and entering, aggravated and sexual assault, and gun cases, with an expectation of a 20% decrease to the current backlog. In addition to reducing the backlog, implementation of a new AFIS Section will allow renewed focus on searching no-suspect cases, with a goal of producing names and probative information for investigative purposes, as well as improving turn-around time on these types of cases. As recidivism is prominent with criminal cases, and an AFIS section will allow highly trained finger print experts to assess and evaluate latent print cases in a focused manner, providing information to investigators in a streamlined fashion. By changing current workflow within the Unit, rapid information transfer will potentially produce suspect information and quickly provide identifying information to investigators, allowing potential suspects to be removed from the streets, preventing a potential escalation in the type of crime. In the timeline of October 1st, 2014 to September 30th, 2015, the BPD is submitting a plan that will allow for the hiring of two contracted consultants, certified by the International Association for Identification, to work in conjunction with existing LPU criminalists on latent print cases. A dedicated workspace, consisting of four workstations that will include computers with dual screens for comparison, fingerprint magnifiers, and up to date AFIS Database system with software compatible with the Digital Image Management System.

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**FY14 Recipient Name:** Massachusetts State Police

**Award Number:** 2014-CD-BX-0018

**Award Amount:** \$149,888

**Abstract:** FORMULA – The Massachusetts State Police Forensic Services Group (MSPFSG) is a state government laboratory dedicated to providing excellence in service through quality forensic science. The Boston Police Department Forensic Technology Division (BPD) and the Office of the Chief Medical Examiner (OCME) together with the MSPPFSG propose the following initiatives to reduce forensic case backlogs, to decrease turnaround time and to provide timelier forensic services. The goal of this proposal is to: 1) Reduce case backlogs; 2) Increase capacity; and 3) train forensic examiners to provide more timely services to our clients. To accomplish these goals, the following initiatives are proposed: 1) Training: To train sworn and civilian member of the Forensic Services Group and the Boston Police Department; 2) Equipment: To purchase hardware and software for the SEM/EDS units to be able to process samples more quickly; and to purchase a forensic desktop and a field examination laptop for an analyst at the new Digital Evidence and Multimedia Section in Springfield; and 3) Software: To purchase forensic software for the desktop and laptop to allow for the examination of evidence. The anticipated outcome is that these collective initiatives will decrease the case backlog and turnaround time of forensic examinations at the respective laboratories state-wide while increasing capacity at each agency.

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**FY14 Recipient Name:** Governor's Office of Crime Control and Prevention

**Award Number:** 2014-CD-BX-0001

**Award Amount:** \$132,777

**Abstract:** FORMULA – Maryland is the 9th most violent state in the United States, with the 7th highest murder rate and the 2nd highest robbery rate in the country, and is also above the national average in overall crime. The state's forensic crime laboratories suffer from lack of financial support to replace or procure much needed equipment, to attend the necessary trainings to maintain their accreditation status, support personnel to dedicate additional hours to work on backlogs within their respective forensic laboratories. The goal is to reduce crime and to improve the quality and timeliness of forensic and medical examiner's services. This will be accomplished with the support of Coverdell funds to purchase much needed equipment, obtain needed training to stay abreast with the latest technology, to remain ASC/LAB accredited, and to provide salary support for overtime in both the Latent Print and Firearms Divisions. The Governor's Office of Crime Control & Prevention is the State Administering Agency of Coverdell funds and will distribute and manage these funds to seven (7) Forensic Crime laboratories and the Chief Medical Examiner's Office. All of the agencies who receive Coverdell funds partnership with each other. Sharing data and trainings have proven beneficial to Maryland. It is anticipated that with Coverdell Support, the State of Maryland will be able to reduce backlogs, obtain training to remain accredited, and procure needed equipment to improve services that are provided to Maryland.

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**FY14 Recipient Name:** State of Maine

**Award Number:** 2014-CD-BX-0051

**Award Amount:** \$63,029

**Abstract:** FORMULA – The Maine Department of Public Safety requests funding under the Paul Coverdell Forensic Science Improvement Grants Program to improve the quality and timeliness of forensic science services provided by the Maine State Police (MSP) Crime Lab; the forensic analysis of controlled substances by the Health and Environmental Testing Laboratory (HETL) and medical legal death investigation services by the Office of the Chief Medical Examiner's (OCME). The funds will also be used for specialized training in the forensic disciplines of crime scene investigations and controlled substances. The objectives for this project are to: 1. Maintain the accuracy, reliability, and credibility of results obtained through forensic analysis of samples submitted for identification, and the accurate determination of cause and manner of death. 2. Provide quality, timely and comprehensive analysis of forensic drug and alcohol evidence to all Maine's local and state law enforcement agencies. 3. Decrease the number of days between submission of a sample and delivery of test results to the requesting agency. FY 2014 Coverdell grant funds will provide training for staff who are directly and substantially involved in providing forensic science services, offset the cost of the related to annual proficiency tests for analysts and provide for contractual services with forensic pathologists to perform autopsies to facilitate timely completion of cases.

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**FY14 Recipient Name:** State of Michigan

**Award Number:** 2014-CD-BX-0049

**Award Amount:** \$221,615

**Abstract:** FORMULA – The Michigan State Police requests FY 2014 Paul Coverdell Forensic Science Improvement Program base funding, to improve the quality and timeliness of service delivery in the Forensic Science Division's Firearms, and Controlled Substances units. The requested funding will be used to continue payroll support for two grant funded positions in the Firearms and Controlled Substances units.

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**FY14 Recipient Name:** City of Minneapolis Police

**Award Number:** 2014-CD-BX-0022

**Award Amount:** \$93,888

**Abstract:** COMPETITIVE – With this funding, the Minneapolis Police Department Crime Lab Unit (CLU) intends to purchase and implement the use of a portable semi-conductor laser, flat panel monitor, portable forensic light sources, as well as additional digital cameras for documentation while using the laser and light sources. The semi-conductor lasers assist crime scene analysts in the detection of inherently fluorescent, untreated latent fingerprint evidence on items and surfaces that may not be suitable for chemical or physical processing of latent prints. When these prints are visualized in the presence of the laser, they can be photographed and documented at the scene or in the lab. The flat panel monitor allows the examiner to view a much larger, more accessible image of the evidence while photographing. The forensic light source can assist crime scene analysts in the detection of multiple types of evidence including: body fluids, hairs, fibers, bruises and bite marks on human skin, and pattern wounds. Utilizing a laser and forensic light source at a crime scene expedites the searching process and allows the analyst the ability to document the location of the fluorescing evidence through photographs in the most efficient manner. A portable laser and light source would allow the crime scene analyst the ability to analyze evidence that cannot be transported to the CLU due to size or other circumstances, and also analyze evidence at the crime scene eliminating the time used to transport, analyze, and package evidence back at the lab. Photographs are the most important form of documentation. Photographs are used in all aspects of the investigation process from documenting the scene, to documenting evidence for forensic examinations. Digital cameras continue to improve at a rapid pace; they offer higher resolution and are more sensitive to light, which would greatly increase the quality of documentation of evidence obtained through the use of portable laser and forensic light sources. A working group tasked with evaluating commercially available portable semiconductor lasers, flat panel monitors, forensic light sources, and digital cameras assessed their performance characteristics to make a recommendation on what would best meet the needs of the CLU. These recommendations for equipment upgrades are requested in this Minneapolis Police Department application under the Paul Coverdell Forensic Science Improvement Grant Program. The total amount requested for the new and upgraded forensic equipment is \$93,888.00.

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**FY14 Recipient Name:** Minnesota Department of Public Safety

**Award Number:** 2014-CD-BX-0039

**Award Amount:** \$121,391

**Abstract:** FORMULA – Forensic services are provided to the citizens of Minnesota primarily by three ASCLD-LAB accredited laboratories, the MN BCA Forensic Science Service (BCA 1 FSS), the Hennepin County Sheriff's Office Laboratory (HCSO) and the Minneapolis Police Department Laboratory (MPD). All three agencies continue to see an increased demand for their services, even as laboratory budgets remain unchanged. This project seeks to utilize funding from the Paul Coverdell Forensic Science Improvement grant to meet the goals of the grant program, which are to improve the quality and timeliness of forensic examinations and reduce the case backlog in non-DNA forensic disciplines. The project involves an agreement between the participating labs to split the funding based on the population served. Each laboratory has determined how best to utilize the funding to meet the goals of the program. The BCA FSS will utilize its share of grant funding to support overtime for forensic scientists to process crime scenes and to perform work on backlogged cases. They will also utilize the grant to fund annual fees to maintain ASCLD/LAB accreditation. The HCSO will utilize the grant primarily to provide continuing education opportunities for scientific staff. MPD will use the grant to purchase cameras used in forensic analysis as well as computers and programs needed for analysis of digital evidence. The expected outcomes of this project include a decrease of projected forensic backlogs by providing more hours to work on backlogged cases. The project will also provide for the continual improvement in the quality of forensic services through the support of the ACSLD/LAB accreditation program, continuing education for scientific staff and by providing up to date computer systems and software.

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**FY14 Recipient Name:** Board of Police Commissioners

**Award Number:** 2014-CD-BX-0070

**Award Amount:** \$174,650

**Abstract:** COMPETITIVE – The Kansas City Police Crime Laboratory (KCPCL) seeks to significantly improve the quality of its trace evidence examinations and expand its services with the acquisition of a micro X-ray fluorescence (microXRF) instrument. The KCPCL has provided trace evidence services for more than 50 years. Trace evidence services have gradually declined as crime laboratories have increased their DNA capabilities, which are well-funded by the Federal government. The decline in trace analysis has been ongoing since the incorporation of DNA testing in 1993. During 2013, key investments were made to revitalize trace evidence at the KCPCL: lifting a hiring freeze, reducing biology screening duties for trace evidence staff, freeing lab space for additional trace evidence operations and renewing trace evidence training for police officers and detectives. On March 24, 2014, a trace position was filled to increase trace staffing. The three-person trace evidence staff with 57 years of combined trace casework experience will train the new employee. The KCPCL now has the personnel, the laboratory space, and a renewed demand for testing. However, overall testing quality is diminished due to the lack of equipment designed to identify elements in trace evidence. Such testing is referred to as elemental analysis. Extensive studies funded by the National Institute of Justice (NIJ) demonstrated the utility of elemental analysis in trace evidence. One NIJ study concluded, "Elemental analysis is a very powerful tool for the identification, characterization and/or

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differentiation of many man-made materials that could become a critical piece of information of a forensic investigation." Not having this analytical capability results in reduced discriminatory power of associations, the potential for false associations, and an inability to provide the most meaningful facts for the criminal justice system. Elemental analysis is needed at the KCPCL to improve the quality of its trace evidence testing by better discriminating trace evidence with similar properties and enhancing associations with more thorough analyses. Furthermore, elemental analysis would improve unknown material identifications and the comparisons of glass, paint, soil, tape, building materials and other trace evidence. Adding elemental analysis would also enable services such as metal analysis and aspects of shooting incident reconstruction to be provided. All of these improvements directly improve the quality Part I violent crimes testing at the KCPCL. MicroXRF elemental analysis equipment is best suited to meet the elemental analysis needs of the KCPCL and, ultimately, improve the quality of its trace evidence examinations.

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**FY14 Recipient Name:** Greene County Medical Examiner's Office

**Award Number:** 2014-CD-BX-0067

**Award Amount:** \$174,500

**Abstract:** COMPETITIVE – The Greene County Medical Examiner's Office in Springfield, Missouri is requesting funds to improve the quality and timeliness of forensic death investigations. In order to progress our services, we are in need of a decomposition cooler, disaster trailer, and a mobile x-ray machine. The decomposition cooler would provide a separate location for decomposing human remains to be in an air-tight location. This cooler would reduce the amount of odor that is associated with the decomposition state of said remains. The disaster trailer would serve as a regional aid for natural or accidental disasters that have mass amounts of casualties. The trailer will allow the medical examiner's office staff to be on-site with the appropriate tools to provide instant assistance. The decomposition cooler and disaster trailer would serve as additional morgue storage. The disaster trailer would be the back-up location if a power-outage was to occur. Lastly, a mobile x-ray machine is needed to provide complete and immediate manner and cause of death information about the decedent. The x-ray machine would allow the pathologist to see the skeletal damage that might be associated with the decedent's death. The x-ray machine would eliminate film and chemical use and eliminate transporting the decedent to the Boone-Galloway County Medical Examiner's Office in Columbia, Missouri. The x-ray machine would also reduce the backlog of Greene County cases at the Boone-Galloway County Medical Examiner's Office. The proposed equipment will allow the staff of the Greene County Medical Examiner's Office to provide accurate identification of manner and cause of death, timely results, reduction of backlog, and regional disaster readiness.

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**FY14 Recipient Name:** Missouri Department of Public Safety

**Award Number:** 2014-CD-BX-0029

**Award Amount:** \$135,361

**Abstract:** FORMULA – As the demands on crime laboratories continue to increase, it's essential for crime laboratory personnel- in all forensic science disciplines- to be adequately trained, competent and proficient in the latest forensic technologies and methodologies. As a result, training and certification are keys to Missouri's statewide plan to improve the delivery and

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quality of forensic science services its crime laboratories provide to the law enforcement communities they serve. The Missouri Department of Public Safety (DPS) will coordinate with the Missouri Association of Crime Laboratory Directors (MACLD) to use Missouri's portion of base funding [\$136,574] from the FY14 Paul Coverdell Forensic Science Improvement Grants Program to provide forensic science training and certification for the personnel of Missouri's crime laboratories. This is a continuing Coverdell-funded program that will provide professional training in a variety of forensic science disciplines including biology/DNA, firearms, impression & pattern evidence, toxicology, trace evidence, crime scene, and drug chemistry as well as areas such as International accreditation, laboratory management, process mapping, auditing, and laboratory inspections I assessments. This program will directly improve the quality and timeliness of forensic science services provided to the law enforcement community of Missouri by increasing examiner proficiency, competency, knowledge, skills and abilities. This program involves all of Missouri's crime laboratories - those operated by units of local government and those operated by the State - and will be administered by Missouri's State Administrating Agency- the Missouri Department of Public Safety.

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**FY14 Recipient Name:** Department of Public Safety

**Award Number:** 2014-CD-BX-0064

**Award Amount:** \$149,128

**Abstract:** FORMULA/COMPETITIVE – The Mississippi Crime Laboratory System, an ASCLD/LAB accredited system, consists of a central full-service laboratory in Jackson and three regional laboratories located in Batesville, Meridian and the Gulf Coast. The basic mission of the laboratory is to provide a full range of forensic services to law enforcement agencies throughout the state by performing testing activities that meet the stringent requirements of the International Standard ISO17025:2005 and satisfy the needs of the customer. Mississippi's economic recovery has been slow, resulting in reduced revenue to meet all the needs for State funds. As a result the Mississippi Crime Laboratory (MCL) has received significant budget cuts that have prohibited the growth in laboratory capacity that the MCL case load requires and a backlog of unworked Latent Print and Drug cases has developed. We plan to use the funds available from the 2014 Paul Coverdell Forensic Science Improvement Program to improve current operation in the Drug Analysis and Latent Print Sections. By purchasing a gas chromatograph/mass spectrometer with minimal accessories, using some existing software, and limited funds from another source we will be able to address the main need of the Drug Section with 2014 Coverdell Base funds. MCL must request competitive funds to address the cost of the software and equipment needed by the Latent Prints Section. In November 2011, ASCLD/LAB approved supplemental requirements addressing Latent Print Examination Records for the Accreditation of Forensic Science Testing Laboratories which mandate extensive documentation as part of the latent print case record. MCL Latent Print examiners use outdated software which does not provide the documentation required and examiners must manually attach documentation. This reduces the quality and timeliness of Latent Print examinations and increases the backlog of unworked cases. We plan to use competitive funds to purchase the ADAMS Latent Case Management and ACE-V Module (Analyze, Compare, Evaluate and Verify) to provide a computerized process for documentation required as part of the latent case data management record. In order to cut the cost we will use 4 desk top computers, one for each lab, rather than purchasing 4 servers and server licenses. MCL will provide existing

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Acquisition/View Workstations, Image Processing and Photoshop software. The GC/MS instrument to be purchased for Drug analysis will replace an obsolete instrument that is no longer supported by the manufacturer. This will decrease downtime, improve turn-around-time and decrease the backlog of unworked cases. Purchase of the ADAMS Latent Case Management and ACE-V Module will provide MCL latent print examiners in all 4 labs with the tools needed to improve the quality and timeliness of the forensic services that they provide and will meet the goal of the FY2014 Paul Coverdell Forensic Science Improvement Grants Program.

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**FY14 Recipient Name:** Harrison County Sheriff's Department

**Award Number:** 2014-CD-BX-0025

**Award Amount:** \$38,000

**Abstract:** COMPETITIVE – Project Goals and Objectives: The Harrison County Sheriff's Office (HCSO) is a multi-jurisdictional law enforcement and corrections agency, dedicated in its mission to serve and protect the citizens of Harrison County, Mississippi. In order to provide this vital service, constant investment in upgraded technology is imperative. As a unit of local government, the HCSO requests funding through the competitive application process of the Paul Coverdell grant program in the amount of \$38,000.00 to improve its ability to serve citizens with the assistance of fingerprint technology by: 1) Supply neighboring agencies with the software necessary to forward their known criminal fingerprints to the HCSO (host agency for the MS Gulf Coast Regional Fingerprint Database); 2) Purchase five Mobile ID units which will allow the HCSO to capture forensic quality fingerprint images for the transmission to remote AFIX Tracker databases for fast search and accurate identification of unknown subjects and John/Jane Doe's. The software and hardware will allow the HCSO and all agencies in the region to compare latent prints to a comprehensive regional known fingerprint database; thus, increasing the probability of suspect identification. Project Plans: The HCSO is dedicated to providing our criminal investigators and forensic technician with the proper equipment and technology that will best assist us in the identification of criminals and the exoneration of the innocent. To have evidence processed much more efficiently than before can also save investigators precious time and prevent more crimes from being committed. The acquisition interface software designed to forward fingerprint records, and multiple Mobile ID devices will allow for efficient forensic evidence processing which is vital to our ability to offer a case file to the District Attorney's Office that is up to the expectations of modern-day juries, who are greatly influenced by the "CSI Effect." Methodology: The funds requested in this application will be used to acquire equipment and software which will improve the quality and timeliness of forensic services and increase the number of items of evidence that will be analyzed.

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**FY14 Recipient Name:** Montana Board of Crime Control

**Award Number:** 2014-CD-BX-0046

**Award Amount:** \$63,029

**Abstract:** FORMULA – The Montana Department of Justice Forensic Science Division Laboratory is accredited to the International testing standard by the American Society of Crime Lab Directors/Laboratory Accreditation Board (accreditation number: ALI-159-T) and is the sole source of forensic services in the state. The State Medical Examiner's Office is also part of the laboratory. The goals for this funding request include: maintain a half-time forensic toxicology

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technician position to help with toxicology case turn-around times and backlogs; provide continuing education for our forensic science staff in order to maintain the quality of services and when practicable, the advancement of forensic services; to provide for the accreditation of the Medical Examiner's Office and finally, to continue to fund maintenance for our laboratory information management system. Funding for the part-time forensic toxicology technician will support salary and fringe benefits associated with that position. Funding for continuing education for forensic scientists will support participation at: the 2015 American Academy of Forensic Sciences meeting for two scientists, the 2014 Society of Forensic Toxicologists meeting for two scientists and the 2014 International Association for Identification meeting for two scientists. Funding in support of the State Medical Examiner's Office will be directed towards achieving accreditation through the National Association of Medical Examiners (NAME). Finally, the forensic laboratory makes great use of its laboratory information management system to help generate data regarding case work load, case turn-around times, and backlogs. The laboratory also uses this system to write reports and to maintain the chain of custody for evidence throughout the laboratory. Requested funding will be used to support the annual maintenance fee that ensures the system is current and reliable. Permission is granted to the Office of Justice Programs to share this project abstract (including contact information) with the public.

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**FY14 Recipient Name:** North Carolina Department of Public Safety

**Award Number:** 2014-CD-BX-0050

**Award Amount:** \$220,550

**Abstract:** FORMULA – The State of North Carolina will be using its allocation for the 2014 Paul Coverdell Grant Award to work with two forensic laboratories in our state. The Governor's Crime Commission of North Carolina, our state's SAA, is submitting this grant application on their behalf. The Gaston County Police Department Identification Bureau and the Cumberland County Sheriff's Office Crime Laboratory will be the two partners to be awarded funds from this grant award. This document contains the program narrative from each of those potential grantees.

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**FY14 Recipient Name:** North Dakota

**Award Number:** 2014-CD-BX-0042

**Award Amount:** \$63,029

**Abstract:** FORMULA – Funding will be used to purchase a GC/Mass spectrophotometer using a combination of other funding sources and provide funding for continuing education for forensic staff. The overall objective is to improve the quality and timeliness of the services provided by the Crime Laboratory Division.

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**FY14 Recipient Name:** Nebraska State Patrol

**Award Number:** 2014-CD-BX-0052

**Award Amount:** \$63,029

**Abstract:** FORMULA – The Nebraska State Patrol is the acting State Administering Agency for the State of Nebraska. The Nebraska State Patrol Crime Laboratory (NSPCL) is a division within the Nebraska State Patrol. The NSPCL is accredited by the American Society of Crime

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Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB.) \$63,000 is requested and will be devoted to improving the quality and timeliness of forensic science services. This funding will allow for the Quality Assurance (QA) Manager to attend the Association of Forensic Quality Assurance Managers (AFQAM) annual training conference. This conference provides continuing education in the areas of audits, accreditation, calibration, proficiency testing, evidence handling and many other areas which directly affect the Crime Laboratory efficiencies. The NSPCL will be improving its ability to locate, photograph, and analyze footwear/tire impressions through the acquisition of a CrimeLite 82L. This device will provide a consistent, linear light which will highlight large impression evidence. A greater degree of conclusive evidence will be gained. With this funding, an Arrowhead Full Spectral Imaging workstation will be purchased. This workstation provides the ability to perform examinations of items for the presence of latent impressions, without requiring chemical processing. The workstation also adds infrared capturing capabilities that were not previously available. Obtaining this workstation will increase the quality and efficiency of latent evidence examinations, and evaluations. The Nebraska State Patrol Crime Laboratory utilizes two primary laboratory information management systems. The "BEAST" is the evidence management program and "Qualtrax" is the document management program. Both of these programs are vital to the administrative functions within the Lab. In order to obtain the maximum benefit from these systems, it is necessary to upgrade twenty bar code scanners. Along with other computer hardware, these scanners will be dedicated to specific laboratory sections which will reduce the chance for evidence contamination. Installing updates and new programming into the Qualtrax will allow for optimum efficiencies to be realized. Peer reviews will be scheduled for the Toxicology and Trace sections, of which are single person sections. As the Nebraska State Patrol Crime Laboratory moves toward ISO17025 accreditation, having discipline consultants review casework, analytical procedures and other facets is necessary.

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**FY14 Recipient Name:** State of New Hampshire

**Award Number:** 2014-CD-BX-0047

**Award Amount:** \$63,029

**Abstract:** FORMULA – The New Hampshire Department of Justice intends on using funding under the National Forensic Science Improvement Act grant to support and enhance services at the New Hampshire State Police Forensic Laboratory and the Office of the Chief Medical Examiner. The goal of this proposal is to provide ongoing support to the Crime Lab and Medical Examiner's Office so as to allow them to continue to provide efficient and effective services in support of law enforcement throughout New Hampshire. The New Hampshire State Police Forensic Laboratory is currently the sole provider of traditional forensic laboratory services in New Hampshire and is fully ASCLD/LAB accredited. Funding to this agency will be used to enhance the capabilities of the laboratory by supporting training for forensic laboratory personnel and for an ongoing ASCLD/LAB maintenance contract fees. The Office of the Chief Medical Examiner is fully NAME certified and will use these funds to continue support for an evidence cataloguing staff position at the office. The staff position is a continuation of a previously funded grant position that assists the office with the cataloguing of evidence and the overall enhancement of the operation of the Office of the Chief Medical Examiner. That position has proven invaluable in making the overall office more efficient and allowing other staff members to concentrate on their respective jobs.

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**FY14 Recipient Name:** New Jersey Department of Law and Public Safety

**Award Number:** 2014-CD-BX-0023

**Award Amount:** \$365,086

**Abstract:** FORMULA/COMPETITIVE – Formula: Utilizing funds provided under the formula allocation of the Fiscal Year 2014 Paul Coverdell Forensic Science Improvement Grants Program, the New Jersey State Police (NJSP) Office of Forensic Sciences (OFS) proposes to further develop and enhance forensic capabilities among State and local agencies. As a long term plan begun under previous Coverdell Grant awards, funding from this year’s grant will supply the resources to provide New Jersey’s forensic practitioners with the necessary knowledge, skills and capabilities to ensure high quality, timely forensic services throughout the state. Procurement of essential equipment and training will aid in achieving and maintaining accreditation and ultimately ensure that services and analyses provided by all of the State’s agencies are of the highest standard. The NJSP OFS will use funds to replace an outdated gas chromatograph-mass spectrometer used in the analysis and identification of controlled dangerous substances. The current instrument utilized is no longer supported by the manufacturer and replacement parts are no longer available. This instrument is critical in the analysis of evidence submitted for the timely analysis of controlled dangerous substances and to prevent further increases in the number of backlogged cases. The NJSP Ballistics Unit will use funds provided to purchase desktop computers, and software to replace existing inadequate and inoperable equipment. Updated computers are needed to replace computers which can no longer handle the information technology demands required by the use of new integrated digital technologies, data management software, and searchable databases. The New Jersey Office of the State Medical Examiner (OSME) will use funds to develop and organize a comprehensive training program to include the essential criteria of medicolegal death investigation. This training program will be a three-day, statewide training seminar to provide critical training to medical examiner personnel, law enforcement, and healthcare agencies who provide investigative and other input in the conduct of medical examiner investigations. The goal of the training is to achieve standardization, analytical method improvement, and education in the fundamental principles of medicolegal death investigation. This grant proposal will also address the specific individual needs of county and local laboratories to enable them to obtain funding in support of the statewide goals and the purposes of the FY2014 Paul Coverdell Grant. A competitive process for county and local forensic and ballistics laboratories and medical examiners offices will assist these laboratories to provide training and equipment necessary to increase productivity, timeliness and quality of forensic sciences.

Competitive: The New Jersey Office of the State Medical Examiner and the New Jersey State Police Ballistics Unit will use funds provided under the competitive portion of the Fiscal Year 2014 Paul Coverdell Forensic Science Improvement Grants Program to purchase desktop computers, software, and printers to replace existing inadequate and inoperable equipment. Updated computers are needed to replace computers which can no longer handle the information technology demands required by the use of new integrated digital technologies, data management software, and searchable databases. The Ballistics Unit will use funds to purchase two comparison microscopes for examiners to utilize for their examinations. During the last 12 years, the Ballistics Unit has experienced a three hundred percent increase in casework submissions and has grown from 5 to 12 examiners. The examiners process these submissions

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using comparison microscopes and computers. In this same time frame, the computers have not been replaced and the number of comparison microscopes has decreased from five to three available for the 12 examiners. The goal of this project is to improve the timeliness of finalizing and reporting out to concerned parties forensic medicolegal death investigations, as well as the results of ballistics examinations. This will be accomplished through the utilization of updated computers with higher data processing speed, abilities, and capacity, in addition to the use of comparison microscopes with digital camera attachments.

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**FY14 Recipient Name:** New Mexico Department of Public Safety

**Award Number:** 2014-CD-BX-0004

**Award Amount:** \$63,029

**Abstract:** FORMULA – The New Mexico Department of Public Safety (NMDPS), as the State Administering Agency for Department of Justice funding, is applying to the Paul Coverdell Forensic Science Improvement Grant Program on behalf of New Mexico's, three forensic laboratories, and one medical investigator's office as a collaborative effort to standardize our state and local laboratories. Following a state strategic plan for the forensic laboratory improvements, the grant funding will further the state's ability to improve the quality and timeliness of forensic science and medical investigator services. In order to improve crime laboratories throughout the state of New Mexico, the Paul Coverdell Grant funds will be used for overtime, outsourcing, training and educational opportunities, supply needs, and laboratory certification fees. The New Mexico agencies working in this collaborative effort include New Mexico Department of Public Safety (DPS) Forensic Laboratory, Albuquerque Police Department (APD) Crime Laboratory, Department of Health Scientific Laboratories Division (SLD), and the University of New Mexico Office of the Medical Investigator (OMI). With the grant funding, New Mexico laboratories will incorporate segments of the state strategic plan for the forensic laboratory improvements through recommendations to annually commit funding for training programs, to conduct overtime, to purchase necessary supplies to enhance efficiency and to outsource samples to nationally accredited laboratories for faster turnaround times in analyzing cases to address the continually mounting forensic backlogs. The forensic laboratories have a vital need for funding to meet gaps in providing education and certification for the forensic examiners. Forensic scientists must maintain their credentials as expert witnesses; remain current with the latest techniques as required by law enforcement investigators, state and local prosecutors and courts; and uphold and maintain laboratory accreditation guidelines. Outsourcing of samples has demonstrated to be a positive approach to reducing the backlog of cases not being analyzed within 30 days at the OMI. Overtime is assisting to maintain the backlogs from increasing at the DPS and SLD state laboratories.

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**FY14 Recipient Name:** Nevada Department of Public Safety

**Award Number:** 2014-CD-BX-0021

**Award Amount:** \$63,029

**Abstract:** FORMULA – The State of Nevada has two forensic laboratories accredited through the American Society of Crime Laboratory Directors Laboratory Accreditation Board. Las Vegas Metropolitan Police Department Forensic Laboratory (LVMPD-FL) serves the southernmost part of the state which accounts for approximately 67% of Nevada's population. Washoe County

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Sheriff's Office Forensic Science Division (WCSO-FSD) provides forensic services to 13 Northern counties and approximately 33% of the state's population. Coverdell grant funds will be utilized to carry out the state's plan to improve the quality of forensic science and improve the timeliness of forensics processed. Within both laboratories, forensic scientists examine firearms and toolmark evidence and the Latent Print Detail examines fingerprints, palm prints, and foot prints. The expertise needed to formulate conclusions in these disciplines is founded in training, job experience, and continuing education. Both Labs identified continuing education opportunities that would best serve to improve crime scene, latent print, impressions evidence and firearms services to their customer agencies. The selected trainings make the most of available training, industry discussion and research topics while allowing multiple investigators/analysts the opportunity to attend the described professional conferences. Scientific members of LVMPD's Comparative Analysis Detail and Latent Print Detail, and WCSO-FSD's Firearms and Toolmark Section, and Forensic Investigation section will attend three conferences. Attendance will improve the depth of the forensic scientists' knowledge, afford the scientists opportunities to discuss the state of their profession with their peers and the actual researchers in order to positively impact the quality of service and improved efficiency: the International Association for Identification Annual Conference, the Association of Firearms & Toolmark Examiners Annual Training Seminar and the Northwest Association of Forensic Scientists. LVMPD-FL plans to bring researchers into LVMPD-FL to provide a four day in-house workshop on "Understanding Exclusion and Sufficiency Decisions" for all members of the Latent Print detail and two members of the WCSO-FSD. The key piece of instrumentation used by scientists in the LVMPD-FL Firearms Unit is the comparison microscope used to determine if bullets and cartridge cases from shooting scenes had been fired by a suspect's firearm. Funds are requested to upgrade the computer software needed for three of these microscopes. To link crime scenes and firearms, and to identify suspects, the Firearms Unit utilizes the National Integrated Ballistic Information Network (NIBIN) and the Latent Print Detail utilizes the Automated Fingerprint Identification System (AFIS). Funds are requested to improve timeliness of forensic reporting by allowing for scientists and technologist to work overtime to reduce the number of backlogged cases waiting for NIBIN and AFIS entry.

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**FY14 Recipient Name:** New York State Division of Criminal Justice Services

**Award Number:** 2014-CD-BX-0005

**Award Amount:** \$440,092

**Abstract:** FORMULA – This proposal seeks base funding in the amount of \$399,636 plus NYS Division of Criminal Justice Services (DCJS) State administrative costs \$44,399. Funding will provide applicants with resources to help continue to improve the quality and timeliness of public forensic and medical examiner services (medical examiner services refers to Toxicology only for the purpose of this application). As the state administering agency, DCJS is working closely with New York State's forensic and medical examiner laboratories to improve each laboratory's efficiency and effectiveness in the delivery of forensic analysis services to their client agencies. As a requirement to receive funding under this grant announcement, laboratories were required to submit to DCJS a certification stating that they had an improvement plan detailing how Coverdell funding would help to reduce/eliminate backlogs and improve overall timeliness and quality of forensic and medical examiner services. In addition to the laboratory improvement plan, all laboratories within NYS are required to participate in technical working

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groups whose purpose it is to improve the quality of forensic sciences within NYS. As presented in the program narrative and budget, much of the Coverdell funds requested will support laboratory equipment and personnel/fringe expenses. The former will primarily help to increase lab efficiency and allow lab staff to complete multiple tasks simultaneously while the latter will support staff hours to help reduce/eliminate case backlogs and to allow more time for the lab to process time sensitive cases. Specific project goals, objectives, tasks, etc. are included in the program narrative portion of the application.

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**FY14 Recipient Name:** Cuyahoga County Coroner's Office

**Award Number:** 2014-CD-BX-0003

**Award Amount:** \$175,000

**Abstract:** COMPETITIVE – Statement of the Problem: According to the current FBI UCR statistics, Cuyahoga County, the target area for the project, represents 18% of all Part 1 crime in Ohio. The Cuyahoga County Medical Examiner's Office, Regional Forensic Science Laboratory (CCRFSL) processes DNA from these cases and in 2012 the CCRFSL began to accept ALL Part 1 crimes instead of only Violent Crimes. Since this new policy came into effect, between 2010 and 2012, there was a 191% increase in the number of DNA cases coming to the CCRFSL for processing, which created a backlog of DNA cases. The county currently has an estimated population of 1, 265,111 according to the latest U.S. Census Bureau statistics. Project Goals and Objectives: The goal of the project is to improve the quality of the DNA results by using an expert DNA mixture calculation and interpretation system. Many DNA test results that were considered "inconclusive" will now be able to be processed with this system and provide "conclusive" results. The new system is in part automated and while the system does calculations it will allow the DNA staff to process more cases, thus, reducing the backlog and increasing the quality of the results. Brief Statement of the Project Strategy or Overall Program Following the guidance from the FBI's Scientific Working Group on DNA Analysis Methods (SWGDM), the CCRFSL has determined the need to improve the quality of their test results by purchasing an expert system on DNA mixture calculation and interpretation. The new system will use the SWGDAM recommended probability approach to interpretation and can analyze results from the latest DNA collection methods such as Touch DNA. The project will include purchasing the system/software, installation, two levels of training for staff, validation, and reporting. Description of Significant Partners: The CCRFSL will partner with the Cuyahoga County Department of Public Safety and Justice Services, Public Safety Grants Division. The partner division will provide the grant administration component of the project allowing the CCRFSL to focus on the implementation, tracking, and the technical aspects of the project. Anticipated Outcomes: We anticipate that the quality of the DNA test results will improve with more "conclusive" test results and that the backlog will reduce as DNA Analysts can process more cases with this automated system.

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**FY14 Recipient Name:** Ohio Office of Criminal Justice Services

**Award Number:** 2014-CD-BX-0057

**Award Amount:** \$259,131

**Abstract:** FORMULA – The forensic science field plays a critical role in crime and justice. Specifically, the application of this science provides criminal justice professionals with scientific

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information that aids in the investigation and prosecution of criminal matters and furthers public safety. As a vital part to helping ensure public safety and an ever-evolving field, it is imperative that professional staff, including scientists, pathologists and medical examiners are adequately trained and equipped with relevant information, data and resources so that the services provided throughout the state of Ohio are timely and of the highest quality. The focus of this application is to provide funding to 12 state and local entities throughout Ohio that provide forensic science services to criminal justice professionals. The funded entities will work to improve the quality, timeliness and credibility of the services provided. This goal will be achieved through the following activities: 1.) Attendance and participation at relevant trainings/conferences/meetings in order to obtain up-to-date information relevant to forensic analysis. 2.) Obtain contractual agreements with professionals for the provision of forensic science services and maintenance of laboratory equipment to enhance quality assurance. 3.) Overtime hours will be worked to reduce the backlog of cases. 4.) Procurement of software licenses and maintenance as well as supplies, including proficiency tests to retain and enhance analytical ability. 5.) Maintain accreditation through the payment of annual fees. Through the FY 2014 Coverdell Program, laboratories and medical examiner/coroner offices in Ohio will be provided with funding that is critical to producing efficient and effective services that impact the productivity of the criminal justice system. Each entity set to receive funding has identified specific objectives pertinent to their agency's needs. While the needs of one agency may differ from the needs of another agency, it is important to note that Ohio convenes a group of key stakeholders that meet on a quarterly basis to discuss forensic science services throughout Ohio. This is an opportunity to share with colleagues and discuss needs so funding priorities can be established.

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**FY14 Recipient Name:** Oklahoma District Attorneys Council

**Award Number:** 2014-CD-BX-0048

**Award Amount:** \$256,627

**Abstract:** FORMULA/COMPETITIVE – Formula: In Oklahoma numerous law enforcement agencies provide forensic science and/or medical examiner services in one, or more than one, of the most common forensic science disciplines. The State of Oklahoma respectfully requests to utilize the Paul Coverdell Forensic Science Improvement Formula Grant to improve the quality and timeliness of forensic science and medical examiner services for the criminal justice system in the State of Oklahoma and to reduce or eliminate the backlog of evidence in forensic science cases by funding six (6) state and local forensic science labs. The labs in this proposal include the Oklahoma State Bureau of Investigation (OSBI), the Tulsa Police Department (TPD), the Office of the Medical Examiner (OCME), the Broken Arrow Police Department (BAPD), the Ardmore Police Department (APD), and the Norman Police Department (NPD). The State of Oklahoma is eligible for \$87,707 under the FY2014 Coverdell Forensic Science Improvement Formula Grant Program. As the state administering agency for the Coverdell Grants, the Oklahoma District Attorneys Council will use ten percent (10%), or \$8,770.70 of the allocated funds for personnel costs and operating expenses needed to implement the grant program. The remaining funds will be allocated to the six (6) participating labs based on the number of full-time analysts at the individual lab compared to the total number of analysts for all participating labs. The most common use for Formula Coverdell funds is in the Other Budget Category. Three agencies (OSBI, OCME, and BAPD) will be using funds for registration fees to attend professional training conferences and three (3) agencies (Ardmore, Norman, and Tulsa) will be

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using the grant funds for annual laboratory accreditation fees. Associated with the Other Category, OSBI, OCME and BAPD have also requested funds in the Travel Category for travel expenses related to attending the professional training conferences. Finally, Tulsa is seeking funding for equipment and OSBI for overtime to reduce case backlog. For a full and specific detailed description see the application.

Competitive: The State of Oklahoma is respectfully requesting \$170,491.80 under the FY2014 Coverdell Forensic Science Improvement Discretionary Grant Program. As the state administering agency for the Coverdell Grants, the Oklahoma District Attorneys Council will use ten percent (10%), or \$15,499.28, of the allocated funds for personnel costs and operating expenses needed to implement the grant program. The remaining funds will be allocated to the six (6) participating labs based on the number of full-time analysts at the individual lab compared to the total number of analysts for all participating labs. This grant, if funded, would address several critical issues in the forensic labs and support improvements above and beyond what could be accomplished with the Coverdell Formula Grant funds. The Discretionary grant would: 1) providing funding to maintain ISO/17025 accreditation for the Ardmore Police Department; 2) provide overtime to reduce the latent print and firearms case backlogs for the Tulsa Police Department, 3) provide funding for continuing education and training for new latent personnel for the Broken Arrow Police Department; and 4) support the purchase of equipment to improve quality and timeliness of forensic science services for the Oklahoma State Bureau of Investigation as well as the Office of the Medical Examiner, and the Norman Police Department.

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**FY14 Recipient Name:** County of Washington

**Award Number:** 2014-CD-BX-0066

**Award Amount:** \$60,172

**Abstract:** COMPETITIVE – The Washington County Sheriff's Office (WCSO) is requesting \$60,172.00 under FY 2014 Paul Coverdell Forensic Science Improvement Grants Program for the Forensic Science Unit (FSU) to eliminate the backlog in latent print analysis over its current operation, to achieve and maintain latent print certification, and to improve workflow and timeliness of forensic science services. The WCSO-FSU will use Coverdell Grant Funds to achieve the following goals and objectives: 1. Eliminate or reduce the backlog of current latent print analysis over its current operation by providing overtime hours to three Forensic Staff. It is anticipated that by performing a total of 400 overtime hours, an additional 60 Latent Print Comparison (LPG) Cases will be completed by the end of the 12 month grant period and would result in a reduction of the current backlog of LPG Cases by approximately 34%. 2. Achieve and maintain latent print certification by providing 200 hours of training and continuing education opportunities. Currently, only one of the three Forensic Staff is certified. The training is part of the overall forensic training plan to achieve latent print certification. Furthermore, the Forensic Staff will enhance their proficiency and knowledge, and will increase competency in the field of latent print analysis, evidence processing, and bloodstain pattern analysis because of this training. 3. Improve the workflow and timeliness of forensic science services by obtaining a temperature/humidity chamber. This equipment offers temperature and humidity control to accelerate the development of 1, 2-indanedione (1, 2-IND) and ninhydrin treated items. Utilizing this equipment will increase the quantity and quality of fingerprint evidence on paper and other porous items, and will streamline the work process to prevent future backlogs. The investment

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made in allocating personnel resources for overtime hours, training and purchasing of equipment will allow the WCSO-FSU to achieve the goals and objectives of this grant proposal which will result in increased productivity, better quality, and more timely service to our customers.

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**FY14 Recipient Name:** Oregon State Police

**Award Number:** 2014-CD-BX-0063

**Award Amount:** \$88,015

**Abstract:** FORMULA – PROGRAM ABSTRACT- Decrease the Controlled Substance Backlog Utilizing Overtime. The Oregon State Police, Forensic Services Division provides scientific, technical and investigative support to the criminal justice system through forensic analysis of evidence. The Division is comprised of five forensic laboratories that are geographically located throughout the state to provide services to all agencies. Those services include the analysis of controlled substances. The Division has 31 analysts trained to conduct controlled substance analysis positioned in all five labs. In 2013, the Division completed 9, 732 of the 10,531 requests received resulting in a 7.6% increase in the controlled substance backlog. The backlog in 2013 increased by over 600% compared with 2012. This increase could be attributed to many factors including lab vacancies (scientists, technicians and directors) and training of new employees, helium to hydrogen carrier gas conversion, and validation of new equipment. The (calendar year) average backlog of controlled substance submissions over 30 days old over the past five years has been 412 requests. The average turn-around-time in 2013 for controlled substance submissions was 31.5 days compared with the previous five-year average of 33.4 days. The Division currently monitors the volume of pending controlled substance submissions in each laboratory and moves casework between labs as necessary to optimize productivity. The Division, on average, is receiving more submissions than can be completed on an annual basis. The goal of the Division is to provide to complete all controlled substance casework within 30 days of receipt. The objective of this proposal is to use grant funds for overtime to assist with meeting the Division goal. Analysts are currently completing an average of .49 submissions per hour. The Division's anticipated outcome is to use approximately 1,060 hours of overtime to complete an additional 500 submissions that will reduce the backlog and improve the turn-around-time.

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**FY14 Recipient Name:** Pennsylvania Commission on Crime and Delinquency

**Award Number:** 2014-CD-BX-0010

**Award Amount:** \$286,073

**Abstract:** FORMULA – The Pennsylvania Commission on Crime and Delinquency (PCCD) plans to use its FY 2014 Coverdell base allocation to support projects intended to improve the quality and timeliness of forensic lab services, in addition to county medical examiner and coroner office services, throughout Pennsylvania, through a competitive solicitation. As with past Coverdell funding, the focus of these funds will be to reduce or eliminate evidence backlogs and in doing so, reduce the processing time, so that cases can be expedited through the state and local criminal justice systems. Emphasis will be placed on demonstrable improvement in current operations, both in terms of quality and timeliness of results. As a guide, potential applicants will be reminded that reduction in case backlogs addresses the timeliness measure. In addition, under the Coverdell competitive portion, our Pennsylvania State Police is requesting funding to

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improve the efficiency of laboratory operations with respect to IBIS, reduce the statewide IBIS backlog, and decrease the statewide IBIS turnaround times. The aforementioned initiatives can occur through the restoration of the IBIS equipment at the Bethlehem and Greensburg Regional Laboratories. The BFS proposes using \$132,735 to procure the upgraded IBIS hardware and software (BRASSTRAX Acquisition System), to reconnect to the ATF's NISIN database at the Bethlehem Regional Laboratory. This hardware/software will expand PSP's IBIS capabilities both quantitatively and qualitatively. Since 1997, PSP has utilized IBIS effectively for the purpose of identifying a discharged cartridge casing to a firearm, when initially the firearm was unknown to investigators. IBIS has the potential to identify and link a firearm to several crime scenes, often in different jurisdictions. The goal in procuring a BRASSTRAX Acquisition Station is to restore the commitment to service for PSP's IBIS submissions to the NIBIN database, previously set forth by the Bureau of Forensic Services, when IBIS was fully funded by the ATF.

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**FY14 Recipient Name:** Instituto de Ciencias Forenses

**Award Number:** 2014-CD-BX-0002

**Award Amount:** \$80,961

**Abstract:** FORMULA – The PRFIS is an ASCLD-LAB-, FBI-, ACGME-, FQS-, and NAME-accredited, full-service forensic facility that has served the citizens of Puerto Rico since 1985. It currently counts with four operational divisions: a) Criminalistics, b) Medico-legal and Toxicology Investigations, c) Forensic Investigations (CSI), and d) Drug Screening and Special Substances Detection (DSSSD). FY2014 Paul Coverdell funding will be used employ one Forensic Technician on a full time basis to provide technical assistance to Firearms Examiners in the analysis activities of priority cases; acquire shell casing images in IBIS/BrassTrax and perform correlations in IBIS/MatchPoint at the Firearms/Toolmarks Section. Funds granted will foster further professional growth by providing continuing education to staff that are directly involved in providing forensic science or medical services to the community. Currently, the Storage Access System requires an increase in capacity storage due to the high volume of information, documents and images that the StarLims uses to manage the operation of cases and collection of information and statistics from state/federal agencies. Therefore, funds are being requested in order to upgrade the storage capacity for an optimal performance of the StarLims V9.36 and V10. Additionally, supplies will be acquired for the Toxicology and Drug Screening Sections, mostly used in the process of extraction and corroboration. As of today, the Medicolegal Division has five Forensic Pathologists to attend the demands for medical examiners services from all the municipalities of Puerto Rico. National standards developed by NAME state that the maximum of number of examinations of pathologists per year should not exceed 325. In order to maintain peak efficiency and effectiveness the Institute is requesting funds to bring one pathologist for autopsy analysis and report completion helping us improve the quality of medical examiners services. File Maker Pro and StarLims (MS SQL) will be used to obtain performance metrics data of interest to the NIJ. Project execution will be carried out by one Grants Specialist, who will ensure that all the Programmatic goals identified in this proposal are achieved on a timely fashion. Quarterly Financial Status Reports will be prepared by the designated personnel and submitted on a timely fashion through GMS. The Grants Specialist will work closely with operational and administrative divisions and will be responsible for: 1) submitting semiannual progress reports; 2) identifying difficulties hindering progress; 3)

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maintaining a binder with all the documentation for any future Grant Progress Assessment; and  
4) submitting the Performance Metric Data required by NIJ.

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**FY14 Recipient Name:** Rhode Island Public Safety Grant Administration Office

**Award Number:** 2014-CD-BX-0014

**Award Amount:** \$63,029

**Abstract:** FORMULA – Rhode Island has used its Coverdell funding to embark on an accreditation readiness program. Rhode Island laboratories began the accreditation process with the Coverdell 2002 award. The exercise has required that the State Crime Laboratory at the University of Rhode Island and the State Forensic Science Laboratory at the Department of Health meet or exceed the required forensic laboratory standards that have been identified by international accreditation standards (ISO 17025). Effective April 9, 2007, the State Crime Laboratory was assessed and found to comply with the requirements of ISO/IEC 17025:2005 and forensic requirements for accreditation. That accreditation expired April 9, 2011. The Laboratory underwent an ISO audit inspection by FQS, Inc. in March of 2011 and was re-accredited for a second four year term: May 25, 2011 to May 25, 2015. To maintain accreditation, the Laboratory must be vigilant in quality control on a daily basis and submit to an annual audit by FQS. It is necessary to have a Quality Assurance Officer available in the Laboratory for this purpose. As of January 2010 the Laboratory made this a full time position by using funds from the Coverdell appropriation and from the state budget appropriation to the Laboratory for its operation. The FY 2014 Coverdell award will fund this position from October 1, 2014 through the federal fiscal year which ends September 30, 2015 at 25.767251% of the current rate of pay with fringe benefits. The total cost of this position is \$90,355 including \$58,930 in salary and \$31,425 in fringe benefits. The Rhode Island Public Safety Grant Administration Office will retain \$2,586 in administrative funds to contribute to the salary and fringe benefits of the grant administrator.

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**FY14 Recipient Name:** Horry County Government

**Award Number:** 2014-CD-BX-0069

**Award Amount:** \$40,193

**Abstract:** COMPETITIVE– The Horry County Police Department (HCPD) is a regional provider of forensic services to local, state, and federal agencies, as well as local public utility businesses. These agencies include but are not limited to; the South Carolina Law Enforcement Division, Department of Natural Resources, Alcohol Tobacco and Firearms, Federal Bureau of Investigation, Secret Service, US Customs, Santee Cooper, Horry Electric and all other agencies located within Horry County. The forensic services provided by the HCPD include specializations in Crime Scene Investigation, AFIS (Automated Fingerprint Identification System) and the analysis of controlled substances. Horry County has a population of 282,285 people. Horry County is home to a popular tourist destination known as The Grand Strand, and in tourist season, the population swells to over one million. This influx in population increases the workload of the forensic services drastically, yet the personnel available to perform forensic services remains the same. In 2012, the Horry County Police Department forensic services processed 7,814 items of evidence, with the work of three laboratory personnel. In 2013, they processed 10,072 items of evidence, an increase of 2,258 items. HCPD lacks a forensic specific

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records management system which drastically decreases the productivity, quality and timeliness of the services provided by the HCPD; resulting in an increase of backlogged cases. If this grant is awarded, the HCPD will use the funds to purchase a laboratory information management system, called JusticeTrax LIMS-plus. Through the acquisition of the LIMS-plus software, the HCPD will be able to optimize the quality and timeliness of the forensic services provided while providing assistance toward achieving accreditation. The LIMS-plus software includes features that decrease the overall possibility of human error, provide case load management, decrease the amount of time needed to generate reports, as well as eliminate the time spent on the repetitive entry of data and case information. These features of the LIMS-plus software enable lab personnel to complete a larger caseload, which will aid in the reduction of the backlog as well as decreasing time spent doing repetitive paperwork, accessing case information and completing report generation. This decrease will allow for lab personnel to maximize the time spent completing laboratory work, resulting in a more timely completion of cases. The decrease in the possibility of human error in all aspects of case work, allows laboratory personnel to provide quality services while maintaining the integrity of all case work performed.

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**FY14 Recipient Name:** Myrtle Beach Police Department

**Award Number:** 2014-CD-BX-0026

**Award Amount:** \$113,869

**Abstract:** COMPETITIVE– The Myrtle Beach Police Department serves the incorporated areas of Myrtle Beach, South Carolina, a primary tourist destination on the east coast. The annual year-round population of the Myrtle Beach area is approximately 30,000. However, due to the high volume of tourists visiting the area, the populace routinely swells above 300,000 people. The Police Department is also one of the largest agencies within the 15th Judicial Circuit, and as such, assists smaller municipalities in complex criminal cases. The Police Department sees deficiencies in its criminal and traffic related investigations, which it aims to improve with the assistance of federal funding. Specifically, the department would benefit from the addition of a laser scanning system. A high-resolution, panoramic laser scanning system with digital mapping capabilities will integrate digital photography with measurements of an entire scene in minute detail and enable the creation of a three-dimensional walk-through. This will augment the capabilities and efficiency of both the Crime Scene and Traffic Units. It will further improve courtroom presentation and effectively place jurors within the original crime scene. The Police Department anticipates that the addition of a scanner would enable the collection of more data, faster, safer, and with improved accuracy.

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**FY14 Recipient Name:** South Carolina Department of Public Safety

**Award Number:** 2014-CD-BX-0037

**Award Amount:** \$106,934

**Abstract:** FORMULA– The South Carolina Department of Public Safety (DPS) is the State Administrative Agency for the Forensic Science Formula Grant Program. Prior to FY2005, the State Law Enforcement Division (SLED) had received the entirety of the Forensic Science funds. SLED provides the criminal justice community with a full-service state of the art forensic laboratory and is tasked with analyzing samples submitted by law enforcement agencies and coroner's offices throughout the state. To assist regional forensic laboratories that provide

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forensic services to surrounding law enforcement agencies, DPS expanded the solicitation beginning in FY2005 to include all forensic labs that would be eligible under the guidelines. The need to decrease the number of backlogged cases at SLED, as well as in regional laboratories, is evidenced by the number of cases that have not been processed. SLED processes approximately 58,830 items of evidence yearly. At present they have a backlog of 2,937 cases in six separate forensic departments (number does not include DNA backlog). Based on the needs of the individual departments, overtime hours will be needed to reduce these backlogs. Regional laboratories are also experiencing backlogs due to the number of cases they are receiving from local law enforcement agencies in their areas. These laboratories typically have one chemist who is responsible for all of the forensic cases that are processed. With the increase in drug arrests in the regions where these facilities exist, more cases are being sent directly to these labs rather than SLED and they are now beginning to experience backlogs as well. These labs strive to process all drug cases within a week to ten days, but this turnaround-time has now increased due to the influx of cases. All the forensic labs strive to increase productivity and efficiency. To accomplish this, the laboratories must purchase instrumentation in keeping with current technology standards. Upgrading old and outdated equipment will allow for the more rapid processing of evidence, faster case turn around and quicker apprehension prosecution and conviction of criminal subjects. Project Goals and Objectives: (1) To reduce the number of backlogged cases in the SLED forensic laboratory by 50%. (2) To reduce the number of backlogged cases in regional forensic laboratories by 50%. (3) Acquire and install equipment in forensic laboratories to reduce backlogs as well and increase the productivity of cases processed.

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**FY14 Recipient Name:** Office of The Attorney General

**Award Number:** 2014-CD-BX-0045

**Award Amount:** \$63,029

**Abstract:** FORMULA– South Dakota intends to utilize the award to help with the foundation of improving the lab services. The SDFL provides services to all law enforcement in South Dakota, including local, state, federal, and tribal law enforcement. The caseload for examiners has increased over the past several years, including increases of nearly 50% in Biology/Serology, and consistent increases in firearms, and fingerprint sections. Funding increase requests for additional staff have not been successful, and the SDFL must be more efficient through better time management and improvements in equipment to increase efficiency. Coverdell Funding would be used to purchase needed equipment upgrades that will be utilized to improve efficiency, reduce turnaround time, and improve accuracy of results. The SDFL is requesting Coverdell 2014 Base Grant funding to help fund the purchase of a Leeds Spectral Vision System. This equipment will increase the capability in the firearms and tool mark section, and can have application in other sections as well, maximizing the return on investment in the SDFL. Coverdell Grant funding would also be used to provide continuing education to lab staff in their respective disciplines. Anticipated outcomes would be that the equipment purchased, in conjunction with the training received would allow for more efficient use of examiner time, allowing for higher productivity. The training would assist the SDFL in maintaining and improving the quality of work in the forensic lab.

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**FY14 Recipient Name:** State of Tennessee

**Award Number:** 2014-CD-BX-0058

**Award Amount:** \$145,479

**Abstract:** FORMULA– The State of Tennessee proposes to use FFY 2014 Coverdell Formula funds to support the following programs: 1) Tennessee Bureau of Investigation - Forensic Laboratory Digital Evidence Storage Enhancements and Lab Equipment Upgrades: The TBI proposes to use funding to purchase and install hardware and software to enable enhanced storage of digital evidence documentation within its laboratory information system. The software system will allow TBI Crime Labs to securely track, store and archive digital evidence documentation. TBI will also purchase and install a new stereo microscope in its Memphis Crime Lab and 2) Tennessee Department of Health - Office of the Chief Medical Examiner - Enhancement of Death Scene Investigation Equipment for County Medicolegal Death Investigators: The TN DOH proposes to use funding to purchase and distribute needed equipment upgrades to eligible county medicolegal death scene investigators (MIs). These equipment upgrades will enable local MIs to better document and submit case evidence to medical examiners and regional forensic laboratories.

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**FY14 Recipient Name:** State of Texas

**Award Number:** 2014-CD-BX-0031

**Award Amount:** \$592,315

**Abstract:** FORMULA– Goal: Reduce the backlog in processing non-DNA forensic evidence  
Objectives: 1. Accurate and timely processing of forensic evidence. 2. Support accredited laboratories with equipment and resources that enhance their ability to process evidence. The Governor's Criminal Justice Division (CJD) proposes to use its 2014 Coverdell funds to support accredited crime laboratories and medical examiner offices in reducing the backlog in processing non-DNA forensic evidence. Grant funds will enhance the ability of laboratories operated by state and local units of government to maintain the integrity of evidence they examine. Funds may be used to pay overtime to forensic scientists, to contract for external processing of evidence or contract with qualified scientists to address backlogs and to acquire new or replacement equipment that will improve operations of the laboratory and support a reduction in the backlog of evidence. State statutes require all crime laboratories operating in the state to be accredited through the Texas Department of Public Safety (DPS). Statutes also address the requirements for admissibility of evidence in criminal proceedings and require that, in order to be considered admissible, the evidence must have been examined by a laboratory that was accredited at the time the evidence was processed. DPS and the Texas Forensic Science Commission are statutorily authorized to conduct investigations into complaints about laboratory negligence or misconduct affecting the integrity of the forensic results.

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**FY14 Recipient Name:** Utah Department of Public Safety

**Award Number:** 2014-CD-BX-0038

**Award Amount:** \$64,966

**Abstract:** FORMULA– The Utah Bureau of Forensic Services (UBFS) is requesting \$65,548 in 2014 Coverdell grant base/formula funds for the UBFS, Utah Bureau of Forensic Toxicology

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(UBFT), and the Intermountain West Regional Computer Forensic Laboratory (IWRCFL). These three laboratories comprise the Utah State forensic laboratory system. The funding would be used to target three of our more pressing issues: manpower, equipment maintenance and training. Funding is requested to continue a part-time Program Specialist in the IWRCFL to maintain or decrease the existing case backlog and turnaround time. The UBFT would like to purchase a reserve LCMS nitrogen generator to offset or eliminate the downtime that results from existing nitrogen generators being serviced. Additionally, travel and training are requested by the UBFS and UBFT so analysts can stay current in their respective disciplines and obtain or maintain certification in those disciplines. Utilizing Coverdell funds in these sections of the laboratory system will help to improve the quality, efficiency and timeliness of forensic science services for the State of Utah.

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**FY14 Recipient Name:** Virginia Department of Criminal Justice Services

**Award Number:** 2014-CD-BX-0055

**Award Amount:** \$184,994

**Abstract:** FORMULA– This proposal involves two agencies in Virginia, the Department of Forensic Science and the Office of the Chief Medical Examiner. The State Administering Agency for this grant is the Virginia Department of Criminal Justice Services. OFFICE OF THE CHIEF MEDICAL EXAMINER (OCME) Statement of the Problem - Currently in the United States there are a limited number of qualified forensic pathologists and a backlog of cases in most medical examiner and coroner offices. On average, it takes one year for a jurisdiction to recruit a qualified board certified forensic pathologist to work cases of violent death. In Virginia, forensic pathology vacancies have been filled by fellows previously trained in Virginia. In addition, fellows who have been trained in the Virginia program have gone to work successfully in other states and localities. There currently is no state funding for this program. Goal - OCME's goal for this project is to increase the number of qualified forensic pathologists in Virginia and the United States, by training and certifying a forensic pathology fellow. Objectives - The achievement of this goal is dependent on meeting instructional objectives set by the ACGME (Accreditation Council for Graduate Medical Education) accreditation. The Virginia OCME has met this instructional accreditation with rigorous program criteria for annual training of forensic pathology fellows. Anticipated Outcomes - Completion of 12 months of training of a forensic pathology fellow to: • Improve effectiveness and speed in medical examiner systems by increasing the pool of qualified forensic pathologists • Improve documentation and evaluation of death investigations and autopsies • Enhance recruitment efforts of medical examiner systems nationally and decrease backlogs. DEPARTMENT OF FORENSIC SCIENCE (DFS) Statement of the Problem - As the demand for forensic analysis services from DFS continues to increase, the agency needs to ensure its scientists have the training necessary to accomplish their assigned caseloads efficiently and in conformity with the highest standards of quality, as defined by the ASCLD/LAB-International accreditation program. Goal - Improve the quality and timeliness of forensic science services in Virginia by the DFS Chemical Analysis, Physical Evidence, and Calibration and Training program areas. Objective - Enhance DFS forensic scientists' skills and knowledge base by providing internal and external continuing education opportunities for approximately 140 scientists in various scientific disciplines. Anticipated Outcomes - The anticipated impact of the proposed scientific training is

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a more knowledgeable scientific staff, translating to forensic services that are more efficient, timely and relevant.

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**FY14 Recipient Name:** Virgin Islands Department of Justice

**Award Number:** 2014-CD-BX-0008

**Award Amount:** \$63,029

**Abstract:** FORMULA– This proposal is being submitted by the Virgin Islands Department of Justice (VIDOJ) to receive funding under the 2014 Paul Coverdell Forensic Science Improvements Grant Program. Funding from this grant will continue to assist VIDOJ in enhancing the forensic services of the United States Virgin Islands and further build on past funding awards from the Paul Coverdell Forensic Science Improvement Grants Program. Specifically, funding will assist in improving the quality, quantity and timeliness of forensic science services in the territory. Currently, there is no crime lab in the Virgin Islands. The overall impact of not having a crime lab in the territory is evident by the delayed trials because the evidence is not being processed in a timely manner. The successful investigation and prosecution of crimes requires, in most cases, the timely collection, preservation and accurate forensic analysis of evidence, which is critical in demonstrating guilt or innocence. Funding support from the National Institute of Justice will assist in implementing institutional changes that will be evidenced by enhanced operations of VIDOJ's forensic services. VIDOJ is requesting \$174,918.00 in base and competitive federal funding to support its forensic services project goal enhancing services. The overall project goal is to provide expert forensic science and medical examiner support services to law enforcement agencies within the jurisdiction of the territory. Forensic Science is a labor-intensive undertaking, in which the quality, experience, and technical aptitude of the personnel performing the analyses are paramount. Training of staff and professional development are necessary elements in ensuring that the Department meet service goals and maintain lab and medical examiner quality requirements. For this reason, it is essential that VIDOJ secure funding that will assist in developing a firm foundation to offset the direct and indirect costs of training, professional development, travel costs, personnel costs, equipment, supplies, and other services. Implementation of this framework for achieving and maintaining professional competency will extend learning opportunities, promote high standards of professional practice, and will provide assistance to increase the quality and timeliness of forensic science and medical examiner services to the territory of the USVI.

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**FY14 Recipient Name:** Vermont Department of Public Safety

**Award Number:** 2014-CD-BX-0043

**Award Amount:** \$63,029

**Abstract:** FORMULA– The Vermont Forensic Laboratory will use the Coverdell base funding to support an Evidence Technician position. The laboratory receives approximately 2,000 cases per year. The Evidence Technician receives all evidence, logs evidence and case information into the lab information system, ensures proper packaging, chain of custody, appropriate and clear analytical requests and returns evidence in cases completed. The Evidence Technician places the evidence in storage, and relays unusual or rush request information to the appropriate section. Submission of each case can take as little as 15 minutes or up to an hour, depending on the amount of evidence and the preparation of the submitter. Without a dedicated Evidence

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Technician, analysts would receive the evidence and perform all of the activities involved with receipt, log in and storage. This would be approximately 2,080 hours of analytical time lost in a year. Impact of lost analyst time is illustrated in the controlled substance/drug unit where approximately 250 cases per year are reported per analyst. Sixty percent of cases reported annually are drugs; without a dedicated Evidence Technician approximately 150 fewer drug cases would be reported and would add to the backlog. Base funding is also requested for a contract with FoCoSS Forensics, a vendor qualified to provide technical, peer review of fingerprint, firearms and toolmarks casework. The latent fingerprint section is currently a single analyst unit. Quality assurance protocols require technical review of casework and verification of any associations. The vendor also provides technical review of higher level casework from the firearms and tool mark section. This section has two examiners, one of whom is not fully trained and engaged in a full range of casework.

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**FY14 Recipient Name:** Washington State Patrol

**Award Number:** 2014-CD-BX-0017

**Award Amount:** \$156,127

**Abstract:** FORMULA– Washington State's 2014 Paul Coverdell grant application is focused on improving the practice of forensic science throughout the state. Grant funds will be used to the benefit of all of the state's 6.8 million citizens. Specifically our goals are to: (1) Improve the quality and timeliness of forensic science and medical examiner services within the state, including those services provided by laboratories operated by the Washington State Patrol (WSP) and those operated by units of local government, and (2) Eliminate a backlog in the analysis of forensic science evidence, including among other things, a backlog with respect to latent prints, forensic pathology, and trace evidence. Our strategy will be to provide funding to: (1) The Clark County Medical Examiner's Office for a Cross Match ten print (fingerprint) system to reduce turnaround time in identification of decedents; (2) The Lewis County Coroner's Office for the purchase of a hand held portable X-ray device which will improve the efficiency of death investigations; (3) Replace digital cameras for investigators in the Spokane County Medical Examiner's Office which will improve the quality of death investigations; (4) Upgrade the autopsy room in the Pierce County Medical Examiner's Office thereby improving the quality of forensic services they provide; (5) Replace the freezer and refrigerator with laboratory grade equipment in the Thurston County Coroner's Office which will improve efficiency and storage; and (6) Purchase a Liquid Chromatography Mass Spectrometer (Time of Flight) for the state Toxicology Laboratory which will improve testing capability and the quality of service provided. Our grant proposal is submitted on behalf of the Washington State Forensic Investigations Council (FIC). The FIC is composed of individuals representing prosecuting attorneys, sheriffs and police chiefs, elected city and county officials, coroners, and public/private medical examiners. The outcomes that we anticipate are increases in timeliness, efficiency, and quality of forensic services provided in each of the Medical Examiner's and Coroner's offices receiving grant funds. Additionally, the state Toxicology Laboratory will gain greater testing capability thereby reducing backlogs and increasing the scope, quality, and timeliness of forensic services they provide.

## FY2014 Paul Coverdell Forensic Science Improvement Grants Program Abstracts

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**FY14 Recipient Name:** Wisconsin Department of Justice

**Award Number:** 2014-CD-BX-0012

**Award Amount:** \$128,610

**Abstract:** FORMULA– The Wisconsin Department of Justice, Crime Laboratory Bureau (WI-DOJ CLB), is applying for the 2014 Paul Coverdell Forensic Science Improvement Grant to improve the quality and timeliness of forensic science and medical examiner services in Wisconsin. The participating agencies consist of WI-D OJ CLB, Milwaukee County medical Examiner's Office (MCME), Wisconsin State Laboratory of Hygiene (WSLH), and the Kenosha County Department of Human Services-Division of Health Laboratory (KCDHS). All of these agencies will continue to take part in a state plan to improve forensic science and medical examiner services in Wisconsin as a result of this grant opportunity. This will be accomplished by continuing to decrease forensic case turnaround time by increasing capacity through the use of technology, modern equipment and enhancing the education, training and proficiency of forensic analysts and medical examiner personnel in each agency. All agencies have an existing grant agreement in place and continue to successfully work together to improve the quality and timeliness of forensic and medical examiner services in the State of Wisconsin.

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**FY14 Recipient Name:** West Virginia Division of Justice and Community Services

**Award Number:** 2014-CD-BX-0016

**Award Amount:** \$63,029

**Abstract:** FORMULA– The West Virginia State Police (WVSP) Forensic Laboratory is an ASCLD/LAB accredited; full service facility which is responsible for analyzing evidential material associated with criminal investigations for all state and local law enforcement agencies. Services are provided, free of charge, to any police agency (including federal) within the 55 counties of West Virginia. The Laboratory serves a population base of approximately 1.8 million people. The Laboratory is composed of eight specialized sections: Trace Evidence, Drug Identification, Toxicology, Biochemistry (DNA), Firearm/Toolmark, Latent Prints, Questioned Documents, and Evidence Processing. In addition, the Laboratory has a Central Evidence Receiving section for receipt and storage of items of evidence. The Laboratory's full time staff includes thirty three (36) analysts/examiners, five (5) technicians, two (2) secretaries, one (1) quality assurance manager, and a director. The Laboratory routinely receives approximately 6,300 cases and examines 40,000 to 50,000 items of evidence per year. The cases received include everything from capital crimes (homicides, sexual assaults) to misdemeanor property crimes. In accordance with the State's Consolidated Forensic Science Plan goal to generally improve and advance forensic services, this project is designed to request funding to provide continued education to forensic analysts through specialized training to further improve the quality of our services. The WVSP Laboratory is facing budgetary constraints to fund continued education. The Federal funding from this award will be used for the following goals: 1- Provide continued education recommended by the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB), the Laboratory's accrediting body. 2- Provide continued education to forensic examiners to maintain their certification.

## FY2014 Paul Coverdell Forensic Science Improvement Grants Program Abstracts

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**FY14 Recipient Name:** Wyoming Office of the Attorney General

**Award Number:** 2014-CD-BX-0053

**Award Amount:** \$63,029

**Abstract:** FORMULA– The Wyoming State Crime Laboratory, (WSCL), an operational section of the Wyoming Office of the Attorney General, Division of Criminal Investigation, is located in Cheyenne, Wyoming. The WSCL is the only full service forensic laboratory in the State that provides examinations in Chemistry, Biology, Firearms/Tool Marks, Latent Prints and Trace Evidence. The fundamental mission of the WSCL is to provide, in a timely manner, a full range of forensic services to state and local law enforcement agencies and the Wyoming Office of the State Public Defender as mandated by State Statute. This laboratory's goals for the 2014 Coverdell program are: 1. Reduction of analysis turn-around times and case backlogs, a) Within the Drug Chemistry Unit by supporting overtime in response to the increased demand for analysis. This increase was specifically associated with the passage of statutory language in the spring of 2011 and 2012 that added additional compounds to the list of controlled substances. b) Within the Latent Print Unit by supporting overtime in response to the increasing demand for analysis. c) Within the Firearms/Toolmark Unit by supporting overtime in response to the increasing demand for analysis. d) Within the Trace Evidence Unit by supporting overtime in response to the increasing demand for analysis. Consistent with the Coverdell Grant Program Goals of improving the quality and timeliness of forensic services and reducing the number of backlogged cases in forensic laboratories, evaluation of this project will be measured by the reduction in the number of days between evidence submission and completion of the forensic reports associated with that evidence. Backlogs will be measured by the number of cases awaiting analysis throughout the project time-span with the additional information of the number of cases submitted during that same time period. The goals of the Wyoming State Crime Laboratory's application are consistent with the Coverdell Grant Program Goals of improving the quality and timeliness of services, as well as decreasing the backlog of cases awaiting analysis.