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OFFICE OF THE CITY CLERK
OAKLAND

2013 OCT 10 PM 2:47 **AGENDA REPORT**

TO: Deanna J. Santana
City Administrator

FROM: Sean Whent
Interim Chief of Police

SUBJECT: OPD 2013 DNA Backlog Reduction Program DATE: September 13, 2013

City Administrator
Approval

Deanna Santana

Date

10-8-13

COUNCIL DISTRICT: City-Wide

RECOMMENDATION

Staff recommends that the City Council authorize the City Administrator to 1) accept and appropriate Grant Funds in an amount not to exceed Four Hundred Twenty Seven Thousand Three Hundred Sixty Eight Dollars (\$427,368) from the U.S. Department of Justice, National Institute of Justice (USDOJ/NIJ) for implementation of the Fiscal Year 2013 Forensic Casework Deoxyribonucleic Acid (DNA) Backlog Reduction Grant Program in the Oakland Police Department (OPD), and 2) waive the advertising and competitive bidding requirements for the purchase of DNA typing supplies and maintenance of DNA typing instruments in the amount of Fifty Four Thousand Seven Hundred Dollars (\$54,700) to be spent with Life Technologies; Thirty Four Thousand Two Hundred Dollars (\$34,200) to be spent with QIAGEN; Four Thousand Eight Hundred Sixty Nine Dollars (\$4,869) to be spent with VWR/Fisher/USA Scientific; Seven Thousand Dollars (\$7,000) to be spent with Aurora Biomed and Thirty One Thousand Six Hundred Dollars (\$31,600) to be spent with Promega.

EXECUTIVE SUMMARY

This report and resolution authorizes the City Administrator, on behalf of the City of Oakland, to 1) accept and appropriate grant funds in an amount not to exceed Four Hundred Twenty Seven Thousand Three Hundred Sixty Eight Dollars (\$427,368) from the USDOJ/NIJ for the implementation of the Fiscal Year 2013 DNA Backlog Reduction Program from October 1, 2013 through March 31, 2015. The funds will be used to offset costs to the OPD Criminalistics Division, Forensic Biology Unit, relative to increased capabilities in analyzing biological evidence associated with criminal cases.

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Public Safety Committee
October 22, 2013

BACKGROUND/LEGISLATIVE HISTORY

The DNA Forensic Casework Backlog Program was created to assist laboratories that conduct DNA analysis in order to improve DNA laboratory infrastructure and analysis capacity so that DNA samples can be processed efficiently and cost effectively, as well as to analyze backlogged forensic DNA casework samples. Improvements are necessary and critical to prevent future DNA backlogs and to help the criminal justice system reach its full potential of DNA Technology.

Because of improvements, OPD Criminalists have reduced their “manual hands-on manipulation time” from approximately 40 hours per average sexual assault case to approximately 20 hours. A portion of this time is spent evaluating the biological material at the start of the case examination, interpreting the data and drafting a written report at the end of each analysis. It is anticipated that an additional increase in completed case requests and decreased turnaround time will also be realized as the new sexual assault differential extraction equipment is used routinely. The expected increase in analyst throughput by the end of the award period is 15% with the use of the robotic processes, and with the continued assistance of the grant-funded Forensic DNA Technician.

OUTCOME

The ultimate goal of the OPD Criminalistics Division’s request for Fiscal Year 2013 (FY13) DNA Backlog Reduction Grant funds is to continue to reduce Forensic Biology Unit turnaround time on all non-rush DNA analyses; cutting average case request completion time to less than 100 business days.

A total of 160 backlogged case requests will be entered into the FY13 DNA Backlog Reduction Program. It is anticipated that 65% of sexual assault cases and 90% of homicide and property crime cases in the program will have biological material that can be subjected to DNA typing. Eligible DNA profiles will be entered into the Combined DNA Index System (CODIS). Based upon past experience with DNA profiles obtained from cases without suspects, we anticipate a 45% hit rate.¹ The outcome of such cross-referenced searches can lead to the arrest and prosecution of violent individuals.

With FY13 DNA Backlog Reduction Program grant funds, the OPD Criminalistics Laboratory expects to:

¹ “Hit rate” is defined as that portion of all cases examined in which at least one suspect is identified. Multiple suspects may be identified in some portion of the cases examined. In “named” cases, investigators frequently request multiple suspects be examined.

1) Decrease biological evidence analysis turnaround time to less than 100 days. Specifically, grant funding will provide continued employment of 1.0 Full Time Equivalent (FTE) Criminalist and 1.0 FTE Forensic DNA Technician. In addition, training and equipment provided through grant funding will increase the productivity of each of the eleven Criminalists to 50 samples per month.

2) Decrease the case backlog by 160 cases. This will be accomplished through in-house testing using overtime, supplies, and maintenance contracts for key instrumentation during the award period, and by the grant-funded FTE Criminalist and Forensic DNA Technician positions.

ANALYSIS

The advent of DNA technology has revolutionized law enforcement's ability to analyze biological evidence at a genetic level. In particular, DNA analysis of semen evidence encountered in sexual assault cases can provide information leading to arrest and prosecution. Coinciding with this revolution in genetic analysis is the utilization of computer-based DNA databases.

Through enactment of the proposed FY13 DNA Backlog Reduction Program grant initiative, the Criminalistics Division will analyze 160 of the backlogged case requests. This will be achieved by accomplishment of the following three goals.

Goal #1:

Reduce the forensic DNA case backlog through Criminalist overtime and purchase of supplies.

In the first half of 2013, the Biology Unit has been able to complete analyses on 179 requests in 89 business days from receipt of request. The ultimate goal of the OPD Criminalistics Division's request for the FY13 DNA Backlog Reduction Program grant funds is to continue to decrease the Biology Unit's turnaround time on all non-msh DNA analyses - ideally to less than 100 business days.

Objective #1:

Fund overtime, maintain equipment and purchase supplies for ten Criminalists to analyze 100 backlogged cases. Case evaluation, biological evidence examination and screening, DNA typing, technical review, and data entry into CODIS will be conducted (in part) on an overtime basis. Criminalist and Forensic DNA Technician overtime will be funded through this grant. The grant will also fund service maintenance contracts for the following equipment: the robotic instrumentation (automation), use of the Six-Sigma Process Oriented Design (POD) case management system, Labor Management Systems (LIMS), and the new streamlined automation

protocols, all of which have been fully implemented with great success. Additionally, laboratory kits, reagents and supplies will be purchased to analyze these 100 backlog cases.

Waiver of the Advertising and Bidding Process

It is in the best interest of the City to waive the advertising and bidding process. The OPD Criminalistics Laboratory Forensic Biology Unit has conducted extensive validation studies using these specific DNA typing kits, reagents and supplies. These validation studies are mandatory per the Federal Bureau of Investigations DNA Quality Assurance Standards (FBI DNA QAS). These specific DNA kits, reagents, supplies and services are available only from the vendors specified. Purchasing DNA supplies from vendors other than those who manufacture DNA kits currently used by the Crime Lab would not be acceptable as the Forensic Biology Unit has not validated their use and hence would violate the FBI DNA QAS. The FBI DNA QAS must be followed in order for the laboratory to enter DNA profiles developed from evidence associated with crimes into the CODIS for searching. The supplies needed for the evaluation of the physical evidence in these cases will be funded through this grant, which include items for evidence processing (pipette tips, tubes, gloves, masks, bench pads, scalpels, etc.), microscopic examination supplies (slides and coverslips), DNA extraction kits (QIAGEN), quantitation kits (Promega), Identifiler Plus DNA Typing Kits (Life Technologies) and the corresponding instrument supplies (pipette tips for Liquid Handler, gloves, scalpels, masks; (VWR/Fisher/USA Scientific). Additional purchases that will be made during the grant period are an expanded core loci kit (Promega), a server and associated software for the CODIS Local DNA Index System (LDIS). Maintenance contracts for two 3130 capillary electrophoresis (CE) instruments, one Versa deoxyribonuclease (DNase) Liquid Handler, two EZ1 XL DNA extraction robots, and two QIAgility Liquid Handlers will also be renewed. These reagents and supplies from these particular vendors have undergone rigorous validation studies and no vendor substitutions are acceptable. These DNA typing kits, reagents, supplies and services are not available from other vendors.

Goal #2:

Increase capacity in the forensic casework laboratory by retaining Biology Unit staff, using grant funding for salaries and benefits of 1.0 FTE Criminalist and 1.0 FTE Forensic DNA Technician. The grant-funded Criminalist will conduct analysis on 60 backlogged cases during the life of this grant.

Objective #2a: Continue the employment of a Criminalist to conduct casework.

Objective #2b: Continue the employment of a Forensic DNA Technician to assist the Criminalists in non-interpretive casework processes.

Goal #3:

Provide required continuing education for each Criminalist and Forensic DNA Technician.

The Criminalistics Division currently does not have an independent budget for training. To comply with and maintain the Criminalistics Division's American Society of Crime Laboratory Directors / Laboratory Accreditation Board (ASCLD/LAB) accreditation, individual scientists' certification, National DNA Index System (NDIS) requirements for CODIS data entry, and the American Board of Criminalistics and Federal Bureau of Investigation (FBI) DNA Quality Assurance Standards (QAS) mandatory educational requirements, Forensic Biology Unit, scientific staff must obtain continuing education credits. It is anticipated that case completion time would improve to less than 100 days on average as a result of conference attendance, implementation of the new technologies learned, and training of new Forensic Biology Unit staff

Objective 3:

Fund Criminalists and Forensic DNA Technician travel to conferences and training opportunities. By the end of the award period, it is expected that all eleven Criminalists and the Forensic DNA Technician will have fulfilled their required continuing education through this grant. By meeting the continuing education requirements of FBI DNA QAS, ASCLD/LAB, and the American Board of Criminalistics, staff will maintain the ability to enter DNA profiles obtained from the biological evidence into CODIS. It is anticipated that case request completion time will improve to less than 100 days, on average, as a result of the new technologies learned.

On average, Forensic Biology Unit case completion time in 2012 was 285 business days from the date of the initial investigator request to publication of the report.

The ultimate goal of the OPD Criminalistics Laboratory's FY13 DNA Backlog Reduction Program grant funds request is to continue to decrease Biology Unit turnaround time on all non-rush DNA analyses - ideally to less than 100 business days. A grant-funded Forensic DNA Technician (initially appointed under the Backlog FY11 Grant) will continue to operate the automated DNA processes, increasing the number and capacity of Criminalists available for data interpretation and case completion. Continued analysis by the grant-funded Criminalist and Forensic DNA Technician will increase Forensic Biology Unit capacity to complete case requests in a timely fashion. With the use of robotic processes, POD case management system, LIMS and continued assistance of the Forensic DNA Technician, a measurable increase in analyst throughput is expected.

Decreased turnaround time and an increase in the number of DNA samples analyzed will enable the Lab to increase the number of cases completed annually by approximately 15% by the end of the award period. DNA profiles obtained from probative evidence will be entered into CODIS,

and based upon past experience with DNA profiles obtained from cases without suspects; we anticipate a 45% hit rate.

PUBLIC OUTREACH/INTEREST

DNA analysis of biological evidence associated with unsolved sexual assault and homicide cases and subsequent searches of these DNA profiles against CODIS and other case profiles can determine if any matches exist. The outcome of such cross-referenced searches can lead to the arrest and prosecution of violent individuals and may also lead to the exoneration of a particular individual as a crime suspect. The ability of the Criminalistics Division to conduct DNA analyses as a routine matter, with a shorter turn-around time, will ultimately lead to an increased number of solved crimes.

COORDINATION

The Budget Office and the City Attorney's Office were consulted in preparation of this report.

COST SUMMARY/IMPLICATIONS

| | | |
|----|---|--------------|
| 1. | AMOUNT OF RECOMMENDATION/COST OF PROJECT: | |
| | Project Delivery | \$427,368.00 |
| | Total Project Costs | \$427,368.00 |
| 2. | COST ELEMENTS OF AGREEMENT/CONTRACT: | |
| | Personnel | \$172,995.00 |
| | Fringe Benefits | \$86,557.00 |
| | Travel/Training | \$14,720.00 |
| | Equipment | \$5,000.00 |
| | Supplies | \$100,869.00 |
| | Consultants | \$31,500.00 |
| | Other | \$7,940.00 |
| | Indirect | \$7,787.00 |
| | Total Cost Elements of Agreement | \$427,368.00 |

3. SOURCE OF FUNDING:

Approval of the proposed resolution will authorize the City Administrator to accept and appropriate grant funds from the USDOJ/NIJ grant program to the OPD Criminalistics Division for the FY13 DNA Backlog Reduction Program in the amount of Four Hundred Twenty Seven Thousand Three Hundred Sixty Eight Dollars (\$427,368.00).

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4. FISCAL IMPACT: \$427,368.00

Funding will be appropriated to the Federal Grant Fund (2112); Criminalistics Division Org. (102610); Criminalistics Division Program (PS05), in a Project Account to be determined. There are no matching funds requirements associated with the acceptance of this grant, which will be managed by the OPD Criminalist III staff person.

Proposed expense allocations are detailed on the following page.

| <i>Budget Category</i> | <i>Amount</i> |
|--|---------------------|
| A. Personnel | |
| Criminalist Personnel and Forensic Technician Personnel (18 mo.) | \$141,180.00 |
| Biology Unit Staff Overtime for Analyses on Backlogged Cases | \$31,815.22 |
| A. Personnel Total | \$172,995.22 |
| B. Fringe Benefits Total | \$86,557.46 |
| <i>Total Personnel and Fringe</i> | <i>\$259,552.68</i> |
| C. Criminalistics Division Staff Travel/Training | \$14,720.00 |
| D. Server for CODIS | \$5,000.00 |
| E. DNA Typing Supplies | \$100,869.00 |
| F. Maintenance on equipment (Liquid Handler, DNA Extraction Robots EZ1 XL [2], Liquid Handler Qiagility [2]) | \$31,500.00 |
| G. Staff Registration for Workshops | \$6,240.00 |
| H. Other | \$1,700.00 |
| <i>Total Direct Costs</i> | <i>\$419,581.68</i> |
| I. Indirect Costs | \$7,786.58 |
| TOTAL PROJECT COSTS | \$427,368.26 |

PAST PERFORMANCE, EVALUATION AND FOLLOW-UP

Forensic Biology Unit casework capacity and case completion turnaround times at the OPD Criminalistics Laboratory have improved significantly over the last year as a result of instrumentation purchased through grant funds received from the USDOJ/NIJ DNA Backlog Reduction and Capacity grant programs. As stated earlier, an average of 179 requests were handled in 89 business days in the first half of 2013 versus an average of 285 cases in 100 business days in 2012.

Due to previous grant funding, Forensic Biology Unit staffing has increased to a level that is appropriate to analyze the physical evidence in association with the crimes committed in Oakland. Acquisition and implementation of several vital forms of equipment have resulted in

an increase in the number of biological samples analyzed by Forensic Biology Unit Criminalists. Such equipment includes electronic sample documentation, automated DNA processes, both DNA extraction and sample manipulation robots, real-time polymerase chain reaction (PCR) for human DNA quantitation, higher capacity CE instruments and computer software to aid the Criminalists in data interpretation. Additionally, information from laboratories utilizing the Six-Sigma approach to case work (funded by USDOJ/NIJ) was utilized to formulate a POD case management system in the Forensic Biology Unit (starting October 1, 2011). It is clear that these processes have significantly increased our capabilities.

SUSTAINABLE OPPORTUNITIES

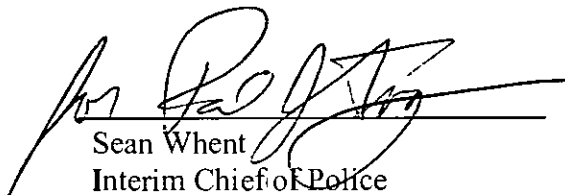
Economic: Whenever possible, supplies and equipment will be purchased locally. Enhancing the Criminalistics Division's ability to more efficiently and effectively process DNA evidence will significantly help to secure prosecutions, removing predators from the streets and thereby creating an environment where businesses can thrive and customers feel safe to shop.

Environmental: There are no environmental issues associated with this report.

Social Equity: Provisions for continuing education and supplies funded by this grant will enhance the Department's ability to analyze biological evidence in sexual assault cases in a more timely fashion, making people from all lifestyles safer in Oakland.

For questions regarding this report, please contact Jennifer Mihalovich, Criminalist III, at (510) 238-3386.

Respectfully submitted,



Sean Whent
Interim Chief of Police
Oakland Police Department

Prepared by:
Andrea Van Peteghem
Grants Coordinator
OPD, Fiscal Services Division

Item: _____
Public Safety Committee
October 22, 2013

FILED
OFFICE OF THE CITY CLERK
OAKLAND

2013 OCT 10 PM 2:47

Approved as to Form and Legality


City Attorney

OAKLAND CITY COUNCIL

RESOLUTION No. _____ C.M.S.

Introduced by Councilmember _____

RESOLUTION AUTHORIZING THE CITY ADMINISTRATOR, ON BEHALF OF THE CITY OF OAKLAND, TO 1) ACCEPT AND APPROPRIATE GRANT FUNDS IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED TWENTY SEVEN THOUSAND THREE HUNDRED AND SIXTY EIGHT DOLLARS (\$427,368) FROM THE U.S. DEPARTMENT OF JUSTICE, NATIONAL INSTITUTE OF JUSTICE (USDOJ/NIJ) FOR IMPLEMENTATION OF THE FISCAL YEAR 2013 FORENSIC CASEWORK DEOXYRIBONUCLEIC ACID (DNA) BACKLOG REDUCTION GRANT PROGRAM IN THE OAKLAND POLICE DEPARTMENT, AND 2) FOR THE PERIOD OCTOBER 1, 2013 THROUGH MARCH 31, 2015, APPROVE A WAIVER OF THE CENTRAL SERVICES OVERHEAD (CSO), AND 3) WAIVE THE ADVERTISING AND COMPETITIVE BIDDING REQUIREMENTS FOR THE PURCHASES OF DNA TYPING SUPPLIES AND MAINTENANCE OF DNA TYPING INSTRUMENTS IN THE AMOUNT OF FIFTY FOUR THOUSAND SEVEN HUNDRED DOLLARS (\$54,700) FROM LIFE TECHNOLOGIES, THIRTY FOUR THOUSAND TWO HUNDRED DOLLARS (\$34,200) FROM QIAGEN, FOUR THOUSAND EIGHT HUNDRED SIXTY NINE DOLLARS (\$4,869) FROM VWR/FISHER/USA SCIENTIFIC, SEVEN THOUSAND DOLLARS (\$7,000) FROM AURORA BIOMED, AND THIRTY ONE THOUSAND SIX HUNDRED DOLLARS (\$31,600) FROM PROMEGA.

WHEREAS, grant funds in an amount not to exceed \$427,368 were awarded by USDOJ/NIJ to support the Oakland Police Department's (OPD's) Fiscal Year 2013 implementation of the DNA Backlog Reduction Program; and

WHEREAS, the DNA Backlog Reduction Program was created to assist laboratories in reducing the number of cases in their backlog in which DNA analyses may be conducted on biological evidence; and

WHEREAS, the funds will be allocated to: continue the hire of one Criminalist and one Forensic Technician, pay staff overtime and required training on backlogged cases, purchase laboratory validated DNA typing supplies and provide maintenance contracts on essential equipment; and

WHEREAS, a waiver of the CSO is requested; and

WHEREAS, the grant term for the proposed initiative is October 1, 2013 through March 31, 2015; and

WHEREAS, the City Council previously authorized acceptance of similar grant funds by Resolution No. 84041 C.M.S. dated October 2, 2012; Resolution No. 83672 C.M.S. dated December 15, 2011; Resolution No. 83030 C.M.S., dated October 19, 2010; Resolution No. 82291 C.M.S., dated September 22, 2009; Resolution No. 81624 C.M.S., dated October 21, 2008; Resolution No. 80869 C.M.S., dated October 2, 2007; Resolution No. 80129 C.M.S., dated September 19, 2006; Resolution No. 79534 C.M.S., dated October 18, 2005 and Resolution No. 78909 C.M.S., dated November 16, 2004; and

WHEREAS, Oakland Municipal Code (OMC) Section 2.04.050.1.5 authorizes the City Council to waive the advertising and competitive bidding requirements of OMC Section 2.04.050 after a finding and determination that it is in the best interests of the City to do so; and

WHEREAS, staff recommends that the City Council make a finding and a determination that it is in the best interests of the City to waive advertising and bidding processes because purchasing DNA supplies from vendors other than those who manufacture DNA kits currently used by the Crime Lab would not be effective due to the other DNA supplies from other vendors have not been validated for use; now, therefore, be it

RESOLVED, that the City Council hereby authorizes the City Administrator or her designee to accept grant funds in an amount not to exceed \$427,368 from the USDOJ/NIJ and to increase revenues and appropriate said budget to OPD and approve the waiver of 12.03% of the CSO; and be it

FURTHER RESOLVED, that said grant funds shall be maintained in the Federal Grant Fund (2112), Criminalistics Division Org. (102610), Criminalistics Division Program (PS05), in a Project Number to be established; and be it

FURTHER RESOLVED, that said grant funds shall be used to fully fund one (1) Criminalist Position and one (1) Forensic Technician position to conduct examination of biological material during the term of the grant; and be it

FURTHER RESOLVED, that said grant funds shall be used to pay overtime and required training to Biology Unit staff for analysis on backlogged cases; and be it

FURTHER RESOLVED, that said grant funds shall be used to purchase laboratory validated DNA typing supplies utilized in the examination of biological material and maintain equipment used during the terms of the grant from Life Technologies, QIAGEN, VWR/Fisher/USA Scientific, Aurora Biomed and from Promega; and be it

FURTHER RESOLVED, that the City Council finds and determines that pursuant to OMC Section 2.04.050.1.5 and based upon the reasons stated above and in the City Administrator's report accompanying this resolution, that it is in the best interests of the City to waive the advertising and competitive bidding requirements of the OMC for the purchases of DNA typing supplies from Life

Technologies, QIAagen, VWR/Fisher/USA Scientific, Aurora Biomed and Promega; and be it

FURTHER RESOLVED, that the City Administrator or her designee is hereby authorized to complete all required negotiations, certifications, assurances and documentation required to accept, modify, extend and/or amend the grant award.

IN COUNCIL, OAKLAND, CALIFORNIA, _____

PASSED BY THE FOLLOWING VOTE:

AYES – BROOKS, GALLO, GIBSON MCELHANEY, KALB, KAPLAN, REID, SCHAAF and PRESIDENT
KERNIGHAN

NOES –

ABSENT –

ABSTENTION –

ATTEST: _____
LaTonda Simmons
City Clerk and Clerk of the Council
of the City of Oakland, California