

2014 OCT -2 PM 12:57



CITY OF OAKLAND

AGENDA REPORT

TO: HENRY L. GARDNER
INTERIM CITY ADMINISTRATOR

FROM: Sean Whent

SUBJECT: OPD 2014 DNA Backlog Reduction Program **DATE:** September 22, 2014

City Administrator
Approval



Date

9-29-14

COUNCIL DISTRICT: City-Wide

RECOMMENDATION

Staff recommends that City Council adopt this Resolution Authorizing the City Administrator, or Designee, to 1) Accept and Appropriate Grant Funds in an Amount Not to Exceed \$491,034 from the U.S. Department Of Justice, National Institute Of Justice (USDOJ/NIJ) for Implementation of the Fiscal Year 2014 Forensic Casework Deoxyribonucleic Acid (DNA) Backlog Reduction Grant Program in the Oakland Police Department; and 2) Waive the Advertising and Competitive Bidding Requirements for the Purchases of DNA Training, DNA Typing Supplies and Evidence Temperature Monitored Freezers in the Amount of \$42,402 from VWR / Fisher / USA Scientific / Aurora Biomed, the Amount of \$40,600 from Life Technologies (a.k.a. Thermo Fisher), \$24,225 from QIAgen, \$4,950 from University of Florida / McCrone, and \$68,001 from Promega.

OUTCOME

This report and resolution will authorize the City Administrator to 1) accept and appropriate grant funds in an amount not to exceed \$491,034 from the United States Department of Justice/ National Institute of Justice (USDOJ/NIJ) for the implementation of the Fiscal Year 2014 DNA Backlog Reduction Program, from October 1, 2014 through September 30, 2016. 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.

BACKGROUND/LEGISLATIVE HISTORY

The DNA Forensic Casework Backlog Program was created to assist laboratories that conduct DNA analysis to improve DNA laboratory infrastructure and analysis capacity, so DNA samples can be processed efficiently and cost effectively. The program also provides continuing

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education courses associated with DNA analyses, as well as funds 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 in the utilization of DNA Technology.

OPD Criminalists have reduced the analysis of Sexual Assault evidence collection kits (SA Kits), from approximately 20 hours to approximately 15 hours, with the implementation of automation to formally laborious manual processes. The increase in completed case requests and decreased turnaround time occurred with the implementation of the automated differential extraction process. As a result of this process, the backlog of the SA kits has been eliminated and the analyses of the contemporary SA kits are completed within four weeks of receipt in the laboratory. It is expected that an increase in analyst throughput and decreased turnaround time in the DNA analyses of evidence associated with homicides, other person crimes, and non-person crimes by the end of the award period will be 15 percent, due to the use of these robotic processes and the continued assistance of the grant-funded Criminalist I and Forensic DNA Technician.

The ultimate goal of the OPD Criminalistics Division's request for Fiscal Year 2014 (FY14) 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 140 backlogged case requests will be entered into the FY14 DNA Backlog Reduction Program. It is anticipated that the homicide, non-sexual assault person crimes 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, the lab anticipates a 45percent hit rate.¹ The outcome of such cross-referenced searches can lead to the arrest and prosecution of violent individuals.

With FY 2014 DNA Backlog Reduction Program grant funds, the OPD Criminalistics Laboratory expects to:

- 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 I and 1.0 FTE Forensic DNA Technician. In addition, training and equipment provided through grant funding will increase the productivity of each of the Forensic Biology Unit Criminalists and the Forensic Technician.

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.

- 2) Decrease the case backlog by 140 cases. This will be accomplished through in-house testing using grant funded overtime, supplies, and purchase of a replacement temperature monitored evidence freezer during the award period, and by the grant-funded FTE Criminalist and Forensic DNA Technician positions.

ANALYSIS

The advent of DNA technology and automation equipment 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 FY 2014 DNA Backlog Reduction Program grant initiative, the Criminalistics Division will analyze 140 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 I grant funded overtime and purchase of supplies.

In the first half of 2014, the Forensic Biology Unit has been able to complete analyses on 226 requests in 145 business days from receipt of request. The ultimate goal of the OPD Criminalistics Division's request for the FY 2014 DNA Backlog Reduction Program grant funds is to continue to decrease the Biology Unit's turnaround time on all DNA analyses - ideally to less than 100 business days.

Objective #1:

Fund overtime, training and purchase supplies for Forensic Biology Unit Criminalists to analyze 140 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. A Criminalist I and overtime will be funded through this grant.

Additionally, laboratory kits, reagents and supplies will be purchased to analyze these 140 backlog cases.

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 I and 1.0 FTE Forensic DNA

Technician. The grant-funded Criminalist will conduct analysis on 100 cases during the life of this grant.

Objective #2a: Continue the employment of a Criminalist I 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 I 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. The grant will fund tuition for the on-line courses for the Applied Statistics for Data Analysis and Laboratory Quality Assurance and Quality Control (University of Florida – Gainesville) and Forensic Microscopy (McCrone), and other training events offered through symposiums, seminars, and the California Criminalistics Institute. 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 travel and tuition for the Criminalists and Forensic DNA Technician travel to conferences and training opportunities. By the end of the award period, it is expected that the Forensic Biology Unit 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.

The ultimate goal of the OPD Criminalistics Laboratory's FY 2014 DNA Backlog Reduction Program grant funds request is to continue to decrease Biology Unit turnaround time on all DNA

analyses - ideally to less than 100 business days (average completion time in 2013 was 218 business days from the date of the initial investigator request to publication of the report).

A grant-funded Forensic DNA Technician (initially appointed under the Backlog FY 2011 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 I and Forensic DNA Technician will increase Forensic Biology Unit capacity to complete case requests in a timely fashion. With the use of robotic processes, team approach to case management, Laboratory Information 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, the lab anticipates a 45% hit rate.

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, Fusion DNA Typing Kits (Promega), Identifiler Plus DNA Typing Kits [Life Technologies (a.k.a. ThermoFisher)] 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 a temperature monitored freezer for short term evidence storage (VWR/Fisher/USA Scientific). 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.

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PUBLIC OUTREACH/INTEREST

This item did not require any additional public outreach other than the required posting on the City's website.

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	\$491,034.00
Total Project Costs	\$491,034.00

2. COST ELEMENTS OF AGREEMENT/CONTRACT:

Personnel	\$ 185,972.35
Fringe Benefits	\$ 98,714.97
Travel/Training	\$12,733.00
Equipment	\$ 37,942.00
Supplies	\$ 137,286.00
Other	\$ 9,845.00
Indirect	\$ 8,540.64
Total Cost Elements of Agreement	\$491,033.96

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 FY 2014 DNA Backlog Reduction Program in the amount of \$491,034.00.

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.

4. FISCAL IMPACT:

OPD's Central Service Overhead (CSO) costs of \$21,651.70 (12.03 percent) are not permitted by the grantor. The General Purpose Fund will contribute \$21,651.70.

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Proposed expense allocations:

<u>Budget Category</u>	<u>Amount</u>
A. Personnel	
Criminalist Personnel and Forensic Technician Personnel (12 mo.)	\$149,786.00
Biology Unit Staff Overtime for Analyses on Backlogged Cases	\$36,186.35
<i>Personnel Total</i>	<i>\$185,972.35</i>
B. Fringe Benefits Total	\$98,714.97
<i>Total Personnel and Fringe</i>	<i>\$284,687.32</i>
C. Criminalistics Division Staff Travel/Training	\$12,733.00
D. Temperature Monitored Freezer	\$37,942.00
E. DNA Typing Supplies	\$137,286.00
F. Staff Registration for Workshops / On-line Courses	\$9,845.00
<i>Total Direct Costs</i>	<i>\$482,493.32</i>
G. Indirect Costs	\$8,540.64
TOTAL PROJECT COSTS	\$491,033.96

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 noted, an average of 226 requests were handled in 145 business days in the first half of 2014 versus an average of 430 cases in 218 business days in 2013.

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 team approach to case management in the Forensic Biology Unit (starting October 1, 2011). It is clear that these processes have significantly increased the capabilities of the Criminalistics Division of the OPD.

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SUSTAINABLE OPPORTUNITIES

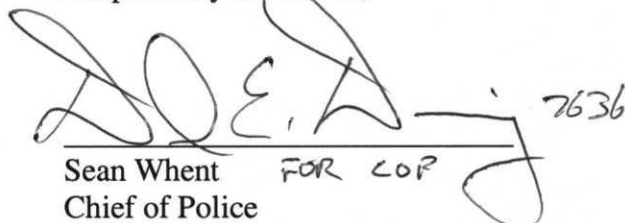
Economic: Whenever possible, supplies and equipment will be purchased locally. Enhancing the Criminalistics Division's ability to more efficiently and effectively process DNA evidence will significantly help to secure prosecutions, removing predators from the streets and thereby creating an environment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

A handwritten signature in black ink, appearing to read 'S. Whent', with the number '7636' written to the right of the signature.

Sean Whent FOR COP
Chief of Police
Oakland Police Department

Prepared by:
Jennifer S. Mihalovich
Criminalist III
OPD, Criminalistics Division

- Resolution

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Quicia Agnes
City Attorney's Office

FILED
OFFICE OF THE CITY CLERK
OAKLAND

OAKLAND CITY COUNCIL

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RESOLUTION No. _____ C.M.S.

Introduced by Councilmember _____

RESOLUTION AUTHORIZING THE CITY ADMINISTRATOR, OR DESIGNEE, TO 1) ACCEPT AND APPROPRIATE GRANT FUNDS IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED NINETY ONE THOUSAND AND THIRTY-FOUR DOLLARS (\$491,034) FROM THE U.S. DEPARTMENT OF JUSTICE, NATIONAL INSTITUTE OF JUSTICE (USDOJ/NIJ) FOR IMPLEMENTATION OF THE FISCAL YEAR 2014 FORENSIC CASEWORK DEOXYRIBONUCLEIC ACID (DNA) BACKLOG REDUCTION GRANT PROGRAM IN THE OAKLAND POLICE DEPARTMENT; AND 2) WAIVE THE ADVERTISING AND COMPETITIVE BIDDING REQUIREMENTS FOR THE PURCHASES OF DNA TRAINING, DNA TYPING SUPPLIES AND EVIDENCE TEMPERATURE MONITORED FREEZERS IN THE AMOUNT OF FORTY-TWO THOUSAND FOUR HUNDRED AND TWO DOLLARS (\$42,402) FROM VWR/ FISHER/ USA SCIENTIFIC/ AURORA BIOMED, THE AMOUNT OF FORTY THOUSAND SIX HUNDRED DOLLARS (\$40,600) FROM LIFE TECHNOLOGIES (A.K.A. THERMO FISHER), TWENTY-FOUR THOUSAND TWO HUNDRED TWENTY FIVE DOLLARS (\$24,225) FROM QIAGEN, FOUR THOUSAND NINE HUNDRED FIFTY DOLLARS (\$4,950) FROM UNIVERSITY OF FLORIDA / McCRONE, AND SIXTY EIGHT THOUSAND ONE DOLLARS (\$68,001) FROM PROMEGA

WHEREAS, grant funds in an amount not to exceed \$491,034 were awarded by USDOJ/NIJ to support the Oakland Police Department's (OPD's) Fiscal Year 2014 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 to employ one (1) Criminalist I and one (1) Forensic Technician, pay staff overtime and required training on backlogged cases, purchase laboratory validated DNA typing supplies, and purchase a temperature monitored evidence storage freezer; and

WHEREAS, Central Service Overhead (CSO) costs, in the amount of \$21,651.70 (12.03 percent), are not permitted by the grantor, therefore the General Purpose Fund will contribute \$21,651.70 and

WHEREAS, the grant term for the proposed initiative is October 1, 2014 through September 2016; and

WHEREAS, the City Council previously authorized acceptance of similar grant funds by Resolution No. 84686 C.M.S., dated November 5, 2013, 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, as 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 designee, to accept grant funds in an amount not to exceed \$491,034 from the USDOJ/NIJ and to increase revenues and appropriate said budget to OPD; and be it

FURTHER RESOLVED: That the General Fund contributes \$21,651.70 to cover Central Services Overhead costs (12.03%); and be it

FURTHER RESOLVED: That said grant funds, in an amount not to exceed \$491,034, shall be appropriated 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 I 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 of Biology Unit staff for analysis on backlogged cases; and be it

FURTHER RESOLVED: That said grant funds shall be used to fund DNA training courses, purchase laboratory validated DNA typing supplies utilized in the examination of biological material and an evidence freezer used during the terms of the grant from Life Technologies (a.k.a. ThermoFisher), QIAGEN, VWR/Fisher/USA Scientific, Aurora Biomed, University of Florida, McCrone and 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 (a.k.a. ThermoFisher), QIAagen, VWR/Fisher/USA Scientific, Aurora Biomed and Promega; and be it

FURTHER RESOLVED: That the City Administrator, or 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