FILED OFFICE OF THE CITY CLERA OAKLAND

To:Office of the City AdministratorAttn:Dan LindheimFrom:Police DepartmentDate:October 14, 2008

2008 OCT -1 PH 5:21

Re: A Report And Proposed Resolution Authorizing The City Administrator To Accept And Appropriate Grant Funds In The Amount Of Two Hundred Twenty Thousand Eight Hundred Eighty-Four Dollars (\$220,884) From The U.S. Department Of Justice, National Institute Of Justice (USDOJ/NIJ), to The Oakland Police Department For The 2008 Forensic Casework DNA Backlog Reduction Grant Program In The Police Department for the Period of October 1, 2008 through March 31, 2010

### SUMMARY

Staff has prepared a report and proposed resolution authorizing the City Administrator, on behalf of the City of Oakland, to accept and appropriate a grant in the amount of \$220,884 from the U.S. Department of Justice, National Institute of Justice (USDOJ/NIJ), to the Oakland Police Department for the 2008 Forensic Casework DNA Backlog Reduction Program for the period of October 1, 2008 through March 31, 2010. The funds will be used to offset costs to the Police Department's Criminalistics Division Forensic Biology Unit relative to increased capabilities in analyzing biological evidence associated with criminal cases.

### FISCAL IMPACT

Approval of this resolution will authorize acceptance of federal grant funds in the amount of \$220,884 for increasing the DNA analysis capacity. Revenues and appropriations will be allocated in the Federal Grant Fund: 2112, Criminalistics Division Org.: 102610; Criminalistics Program: PS05, in a Project Account to be determined. There are no matching fund requirements. Expense allocations are:

Description and Use of Funds	Amount
Laboratory staff Training: DNA Technical Lead,	\$21,059
Criminalist III, Criminalist IIs, and Criminalist I,	
Robotic Liquid Handlers, Stereo Microscope, Digital	\$183,789
Cameras, Alternate Light Sources,	
DNA Typing supplies for New Typing Technologies	\$16,036
Total	\$220,884

Item: \_\_\_\_\_ Public Safety Comte. October 14, 2008

## BACKGROUND

The 2008 DNA Forensic Casework Backlog Program was created to assist laboratories that conduct DNA analysis, improve DNA laboratory infrastructure and analysis capacity so that DNA samples can be processed efficiently and cost effectively, and to analyze backlogged forensic DNA casework samples from Uniform Crime Report (UCR), Part 1 Violent Crimes. These improvements are critical to preventing future DNA backlogs and to helping the criminal justice system use the full potential of DNA technology. The improvements allow staff to process DNA samples in a more efficient and cost-effective manner. Grant funds will support the purchase of DNA liquid handling robots, stereo microscope, digital cameras, alternate light sources, DNA typing supplies to implement additional DNA typing methods, and training for laboratory scientists.

The City Council has previously approved acceptance of grant funds for DNA Forensic Casework Backlog efforts by Resolution No. 80129 C.M.S., dated September 19, 2006 and Resolution No. 80869 C.M.S., dated October 2, 2007.

# **KEY ISSUES AND IMPACTS**

The Laboratory's case completion time during the first six months of 2008 was 135 days. Upon implementation of DNA liquid handling robots, coupled with improved evidence evaluation and documentation (digital cameras, stereo microscope, alternate light source), and training, the Forensic Biology Unit should be able to decrease the case turn-around time to less than 100 days. This decrease will enable staff to increase the number of case requests completed each year. The implementation of additional DNA typing methods will increase the Department's ability to conduct DNA typing on samples previously not amenable to the DNA typing methods currently used.

The DNA profiles obtained from probative evidence will be entered into the Combined DNA Indexing System (CODIS). A DNA match made by CODIS can then be matched to a named individual or to another unknown suspect case. Based upon past experiences with DNA profiles obtained from suspectless cases, staff anticipates a 25% Hit-Rate.<sup>1</sup>

The outcome of such cross-referenced searches can lead to the arrest and prosecution of violent individuals. Additionally, DNA typing may lead to the elimination of a particular individual as a crime suspect. The ability of the laboratory to conduct the DNA analyses as a routine matter, with a shorter turn-around time, will ultimately lead to solving crimes.

<sup>&</sup>lt;sup>1</sup> "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.

### **PROJECT DESCRIPTION**

### **Objective #1**

Implement the use of robotic liquid handler for the automated set-up of DNA Quantitation, Amplification, and capillary electrophoresis. Implement the use of additional DNA typing methods.

The Laboratory will increase the number of cases and decrease the turn around time for the completion of all cases in which biological material is to be subjected to DNA typing by use of two robotic liquid handlers. One robot will be dedicated to the automated set-up for DNA quantitation and amplification (two different protocols). The second robot will be dedicated to the set-up of the post amplified product for capillary electrophoresis. Automation of these steps will reduce the manual manipulation of the DNA samples, yield a more reproducible quantitation, amplification and typing. Validation studies for the implementation of these robots will be conducted using severely degraded DNA typed with MiniFiler and Y STRs DNA typing using AmpFISTR Y. Automation of the DNA analyses will assist in reducing the current turn around time of case requests from 135 days to less than 100 days. The implementation of MiniFiler and Y-Filer will allow analyses to be conducted on biological evidence not amenable to the standard STR amplification and typing.

### Objective #2

#### Improve the evidence evaluation and documentation for a more efficient use of time.

Alternate light sources (ALS), single lens reflex (SLR) digital cameras, and stereomicroscope with photographic capabilities will assist in reduction of turn around time and increased number of completed case requests. The ALS is a valuable tool used in the screening of physical evidence for the presence of potential biological material (blood, semen, saliva, urine). Three alternate light sources will be purchased. Three ALS will reduce the wait-time for the one ALS currently available in the Laboratory. Two SLR digital cameras with the appropriate lenses will complement existing 'point and shoot' cameras. The lenses selected will allow large items of physical evidence to be photographed in their entirety versus in sections. The use of a stereomicroscope with photographic capabilities is a valuable tool in the documentation of smaller items of physical evidence (fingernail clippings, hair, and small stains). Currently, the forensic biology unit has limited access to one stereomicroscope with photographic capabilities (located in a different section in the lab).

Item: Public Safety Committee. October 14, 2008

### Objective #3

Maintain the ability to enter DNA profiles obtained from the biological evidence into CODIS by meeting the continuing education requirements of FBI DNA QAS, ASCLD/LAB, and the American Board of Criminalistics. During the grant period, eleven Forensic Biology Unit staff members (three are new to the Lab DNA procedures) will need to attend training and continuing education programs.

The following are the training and continuing education programs selected to meet the educational requirements:

Promega International Human Identity Conference American Academy of Forensic Sciences Conference BODE Advanced DNA Workshop California Association of Criminalists Semi-Annual Conference Microscopy

The average number of days to complete the analytical work, second reading, reports and technical review of Forensic Biology case requests (homicides and sexual assaults) was 135 days for cases completed in first six months of 2008. Upon attendance of these conferences and training events, it is anticipated that case completion time will improve to less than 100 days on average as a result of the new technologies learned, and training of additional Forensic Biology Unit staff. The training requested will improve the quality of our work product in that the analysts will be informed on the most current research and technical information available. Additionally, the training will help us meet the requirements for continuing education that are expected by the ASCLD/LAB, the FBI DNA Quality Assurance Standards and American Board of Criminalistics.

#### SUSTAINABLE OPPORTUNITIES

*Economic*: Whenever possible, supplies and equipment will be purchased locally.

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

<u>Social Equity</u>: Support personnel 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.

Item: Public Safety Committee. October 14, 2008

# **DISABILITY AND SENIOR CITIZEN ACCESS**

There are no ADA or senior citizen access issues contained in this report.

## RECOMMENDATION

Staff recommends acceptance of the report and approval of the resolution authorizing the City Administrator to accept grant funds in the amount of \$220,884 from the U.S. Department of Justice, National Institute of Justice, and appropriate said funds to the Police Department Criminalistics Division.

# **ACTION REQUESTED BY THE CITY COUNCIL**

Staff recommends that the City Council approve the resolution.

1

Respectfully submitted,

For Wayne G. Tucker Chief of Police

> Prepared by: Jennifer Mihalovich Criminalistics Division Bureau of Investigation

and

Peter D. Fitzsimmons Fiscal Services Division Bureau of Administration

APPROVED AND FORWARDED TO THE PUBLIC SAFETY COMMITTEE:

Office of the City Administrator

Item: Public Safety Committee. October 14, 2008

FILED OFFICE OF THE CITY OFAKLAND CITY	Approved as to Form and Legality
2008 OCT = 1 RESOLUTION NO.	C.M.S.

RESOLUTION AUTHORIZING THE CITY ADMINISTRATOR TO ACCEPT AND APPROPRIATE GRANT FUNDS IN THE AMOUNT OF TWO HUNDRED TWENTY THOUSAND EIGHT HUNDRED EIGHTY-FOUR DOLLARS (\$220,884) FROM THE U.S. DEPARTMENT OF JUSTICE, NATIONAL INSTITUTE OF JUSTICE (USDOJ/NIJ), TO THE OAKLAND POLICE DEPARTMENT FOR THE 2008 FORENSIC CASEWORK DNA BACKLOG REDUCTION GRANT PROGRAM IN THE POLICE DEPARTMENT FOR THE PERIOD OF OCTOBER 1, 2008 THROUGH MARCH 31, 2010

WHEREAS, grant funds totaling \$220,884 have been awarded by the U.S. Department of Justice, National Institute of Justice to support the Police Department's 2008 Forensic Casework DNA Backlog Reduction Program; and

WHEREAS, the Forensic Casework DNA Backlog Reduction Program was created to assist laboratories that conduct DNA analysis 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 from Uniform Crime Report (UCR), Part 1 Violent Crimes; and

WHEREAS, the grant term for the proposed initiative is October 1, 2008 through March 31, 2010; now, therefore be it

**RESOLVED:** That the City Council hereby authorizes the City Administrator or his designee to accept grant funds in the amount of \$220,884 from the U.S. Department of Justice, National Institute of Justice and to increase revenues and appropriate said budget to the Police Department; and be it

**FURTHER RESOLVED:** That said grant funds shall be maintained in the Department of Justice Fund No.; 2112; Criminalistics Division Organization No.; 102610; Criminalistics Program PS05; in a Project Number to be established; and be it

**FURTHER RESOLVED:** That the City Administrator or his 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, \_\_\_\_\_\_, 20\_\_\_\_\_, 20\_\_\_\_\_

PASSED BY THE FOLLOWING VOTE:

AYES- BROOKS, BRUNNER, CHANG, KERNIGHAN, NADEL, QUAN, REID, and PRESIDENT DE LA FUENTE

NOES-

ABSENT-

ABSTENTION-

ATTEST:

LaTonda Simmons City Clerk and Clerk of the Council of the City of Oakland, California