



COUNTY OF SAN MATEO
Inter-Departmental Correspondence
Sheriff's Office



Date: February 4, 2016
Board Meeting Date: February 23, 2016
Special Notice / Hearing: None
Vote Required: Majority

To: Honorable Board of Supervisors

From: Greg Munks, Sheriff

Subject: Agreement with Life Technologies Corporation for validation of the Forensic Laboratory's Global Filer

RECOMMENDATION:

Adopt a resolution authorizing an agreement with Life Technologies Corporation for validation of the Global Filer, the amplification system that will allow the Sheriff's Office Forensic Laboratory to comply with the expansion of the CODIS Core Loci, in an amount not to exceed \$119,118, for a term commencing February 23, 2016 through December 31, 2016.

BACKGROUND:

The FBI has changed the requirements to enter DNA profiles into their database, the Combined DNA Index System (CODIS). As of January 1, 2017, CODIS is requiring that the number of core loci (DNA markers) entered into the database be increased from 13 to 20. This means that all crime labs entering DNA into the FBI's DNA database will need to upgrade their DNA typing systems from the current kits, which mostly include 15 DNA markers, to ones that include at least 20. The Forensic Laboratory currently uses Identifiler, a kit that contains 15 DNA markers (and an additional gender-typing marker).

In order to continue to enter profiles into CODIS and to continue to get hits to many unsolved cases, the Sheriff's Office Forensic Laboratory must upgrade the instrumentation, software, and chemistries. The Forensic Laboratory needs to complete the validation and have the systems up and running by January 1, 2017.

DISCUSSION:

The Sheriff's Office Forensic Laboratory is requesting validation services be done by an external provider in order to continue to maintain casework production during the time of validating these new processes. The services and products provided by Life Technologies Corporation are also inclusive of a new quantitation system that works

better with the newer amplification kits, as well as mixture interpretation software that will allow the Forensic Laboratory to interpret complex mixtures.

Upgrading the chemistry, instrumentation, and amplification kits is mandatory by the FBI; therefore, the Forensic Laboratory's continued ability to enter profiles into CODIS relies on the ability to complete this validation by January 1, 2017. Life Technologies will upgrade the Forensic Laboratory's current equipment and software to equipment and software that will be able to interpret the new quantitation and amplification systems. They will also likely complete the work in a quicker fashion than the casework analysts who have laboratory, court, and crime scene obligations. This would also allow the Sheriff's Office Forensic Laboratory's DNA Unit to continue to produce DNA casework. The addition of advanced mixture interpretation software will help the Forensic Laboratory's analysts to make more conclusions on mixtures in DNA analysis and to keep up with current scientific methodology in interpretation.

The Forensic Laboratory tested other systems but found that the Global Filer worked best with the instruments and computers already installed at the lab. Another vendor's system required several adjustments and did not function as well with the existing equipment at the Laboratory. Therefore, the Sheriff's Office recommends a waiver of the Request for Proposal (RFP) process for Life Technologies Corporation for validation of the Global Filer in order to comply with the CODIS Core Loci. The contract with Life Technologies Corporation is for the amount of \$119,118 and a term commencing February 23, 2016 through December 31, 2016.

The resolution and agreement have been reviewed and approved by County Counsel as to form.

The contract contributes to the Shared Vision 2025 outcome of a Safe Neighborhood by providing the required validation services to bring the Sheriff's Office Forensic Laboratory in compliance with the FBI's requirement to increase the 15 DNA markers to ones that include at least the required 20.

PERFORMANCE MEASURE:

| Measure | FY 2014-15 Actual | FY 2015-16 Projected |
|---|----------------------|-------------------------|
| Number of positive associations in AFIS, CODIS, and NIBIN | 216 | 200 |

FISCAL IMPACT:

The contract with Life Technologies Corporation is for an amount not to exceed \$119,118, and a term commencing February 23, 2016 through December 31, 2016. The contract is funded through Prop 69 monies, which is maintained in a Trust Fund with the Sheriff's Office. The DNA Committee comprised of representatives from the Sheriff's Office, Probation Department, District Attorney's Office, and the Courts have reviewed and approved the funding for this contract. There is no net county cost.