

**Crime Laboratory Equipment Replacement****FY2011 Request: \$86,000****Reference No: 45325****AP/AL:** Appropriation**Project Type:** Renewal and Replacement**Category:** Public Protection**Location:** Anchorage Areawide**Contact:** Dan Spencer, Director, Administrative Services**House District:** Anchorage Areawide (HD 17-32)**Contact Phone:** (907)465-5488**Estimated Project Dates:** 07/01/2010 - 06/30/2011**Brief Summary and Statement of Need:**

This project is to replace aging and outdated scientific testing equipment at the Scientific Crime Detection Laboratory. In order to meet the laboratory's mission of assisting in the department's criminal investigations, the laboratory equipment must be routinely maintained and meet current standards. This project will help the department achieve its mission to ensure public safety and enforce fish and wildlife laws by assuring timely scientific results are available to the criminal justice system.

<b>Funding:</b>	<u>FY2011</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Gen Fund	\$86,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$586,000
<b>Total:</b>	<b>\$86,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$586,000</b>

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

**Operating & Maintenance Costs:**

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
<b>Totals:</b>	<b>0</b>	<b>0</b>

**Additional Information / Prior Funding History:**

Sec 10, Ch 29, SLA 2008, P 74, L 18, \$100.0 GF

Sec 1, Ch 15, SLA 2009, pg 18, ln 28, \$ 50.0 GF

**Project Description/Justification:**

In order to perform necessary analyses, the laboratory uses highly sophisticated and expensive scientific instruments (genetic analyzers, mass spectrometers). To ensure an uninterrupted and consistent level of service, the laboratory must regularly replace aging and outdated scientific instruments. The typical lifespan of scientific instruments is five to ten years, after which time manufacturers no longer provide support in the form of replacement parts and software updates. In order to meet the mission of entering profiles into the Combined DNA Index System (CODIS) and solving "no suspect" crimes, it is necessary to ensure that the laboratory has a stable capital equipment replacement program.

This request is intended as an annual request for ongoing laboratory equipment replacement. This project will provide funding for the following types of equipment: DNA extraction robots, spectrophotometers, and lasers for latent fingerprint detection. Other types of equipment may be purchased if deemed more mission-critical than these items at the time of purchase.

Automated DNA sample preparation allows for analysts to perform other duties, thereby increasing efficiency of the analysts and resulting in a higher throughput of DNA samples. Additionally, the use of robotics results in a higher quality sample being achieved due to the enclosed compartmental design and pre-prepared chemicals utilized. Timely analysis of DNA evidence is critical for successful prosecution of criminal cases. The cost of an extraction robot is \$45,000. If the laboratory is unable to purchase this item, then the likelihood of violent crimes not being prosecuted in a timely fashion, or even dismissed, increases.

UV/VIS (Ultraviolet/Visible) spectroscopy is a common technique employed in controlled substance analysis to quickly screen materials for the presence or absence of controlled substances. The controlled substance section of the laboratory does not have any instrumentation to fill this need. The purchase of this instrument will allow for rapid screening of submitted evidence to eliminate extensive analysis time of samples that do not contain a controlled substance. A UV/VIS spectrophotometer costs \$16,000. Failure to add this important scientific tool results in wasted resources and consumes valuable analyst time trying to demonstrate the nonexistence of a controlled substance.

Detection and preservation (via photography) is a constant challenge in fingerprint identification. More fingerprints can be detected when laser light is used. A laser will increase the number of fingerprints that may be detected, increasing the likelihood of identify suspects in criminal cases. A solid-state technology laser costs \$25,000. Failure to add this important scientific tool to the processing of latent prints increases the potential for prints to go undetected, potentially leading to criminal cases remaining unresolved.