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# Sedgwick County

525 North Main Street 3rd  
Floor  
Wichita, KS 67203

## Legislation Text

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### **CONSIDERATION OF A NATIONAL INSTITUTE OF JUSTICE (NIJ) 2018 CAPACITY ENHANCEMENT AND BACKLOG REDUCTION PROGRAM GRANT IN THE AMOUNT OF \$245,000 FOR NEW DNA LABORATORY STAFF AND INSTRUMENTATION.**

Presented by: Shelly Steadman, PhD., DNA Technical Leader/Manager, Regional Forensic Science Center.

**RECOMMENDED ACTION:** Approve the application for the grant, and if awarded authorize acceptance of the grant, the establishment of budget authority as provided in the Financial Considerations section of this Request, and implementation of the Staffing Table changes identified in the Personnel Considerations section of this Request.

The Sedgwick County Regional Forensic Science Center (RFSC) is an independent local government agency which serves all Sedgwick County, Kansas Law Enforcement agencies. The RFSC has 5.0 FTE Biology/DNA Section positions, all of which are currently filled with qualified case-working scientists.

The DNA laboratory is on the brink of a caseload capacity crisis. In 2014, a multidisciplinary task force convened in Kansas to determine the number of untested kits statewide and the study revealed that over half of the untested kits reside in Sedgwick County. The heightened awareness resulted in a dramatic increase in submissions beginning in 2015. In April 2018, the task force issued formal notification recommending that 100% of the kits collected be submitted for testing. The RFSC currently receives only 30% of the kits collected within Sedgwick County, so kit submissions are expected to triple. In addition to the increased number of sexual assault kits requiring testing, violent crime has continued to rise in Sedgwick County; the DNA section issued twice as many reports/notifications in 2017 than were issued in 2016.

To address these caseload challenges, the Center is requesting resources to enhance the sexual assault screening process through the introduction of an automated extraction platform. Specifically, the RFSC seeks to implement technology that will allow automated differential extraction of mixed stains with the QIAcube and EZ1 Advanced XL robotic workstations, followed by male DNA screening via real time PCR quantification. Male DNA quantification is now considered the gold standard for sexual assault kit sample assessment, replacing less sensitive body fluid classification methods. However, due to the amount of analyst time required to conduct manual differential extractions on mixed stains, screening kits for male DNA is currently not feasible at the RFSC.

Implementation of the automated extraction platform requires validation. Therefore, the RFSC is requesting 1.0 FTE Lab Technician and a budget adjustment for supplies and equipment to carry out the validation of the new platform so that automation can be integrated into the workflow as quickly as possible.

This acquisition program enables the RFSC to enhance capacity and throughput by the introduction

of robotics capable of carrying out automated differential extraction of sexual assault samples. The purchase acquisition will follow standard Sedgwick County purchasing policies. Funding of this equipment acquisition program will assist in the laboratory's goal of processing sexual assault kits in a manner consistent with nationally recognized standards.

**Grant Renewal:** No

**Never Applied:** No

**Applied; not awarded:** No

**Grant Summary and Timeline:** The grant application is due May 7, 2018 with an award notifications to be issued prior to September 30, 2018. The Grant Award will cover the period January 1, 2019 through December 31, 2020. The program will start in January, 2019. The proposed Objective-Activity Timeline is included in the Attachments Section.

**Financial Considerations:**

Grant period starts: January 1, 2019

Grant period ends: December 31, 2020

Source of funding

Grant: \$245,000.00

Required Match: \$ 0

Required Cash Match: \$ 0

Required In-Kind Match: \$ 0

Other funding:

TOTAL SOURCES \$245,000.00

Uses of funding

Operational costs: \$245,000.00

Personnel: \$59,500.00

Contractual services:

Operational supplies: \$15,500.00

Equipment: \$170,000.00

Indirect administrative costs:

Capital projects cost:

TOTAL USES \$245,000.00

Source of matching funds: None

Source of other funding: None

**Budget Authority Adjustment:** Requests for additional budget authority of \$245,000 for 2019 in 15036-256 and residual balances of the project may be established in 2020.

**Personnel considerations:** This request includes a temporary staffing table adjustment for the addition of 1.0 FTE Technician position to the RFSC staffing table from January 1, 2019, through December 31, 2019.

**Expected measurable outcomes:** Goals, objectives, and expected results

The goal of this project is to enhance the sexual assault screening process through the introduction of an automated extraction platform. Specifically, the RFSC seeks to implement technology that will allow automated differential extraction of mixed stains with the QIAcube and EZ1 Advanced XL robotic workstations, followed by male DNA screening via real time PCR quantification. This will

replace the current classic “serological” screening techniques (presumptive color tests for blood/semen/saliva, microscopic sperm searches, etc.). SAK exhibits would be differentially extracted and evaluated quantitatively for male DNA, now considered the gold standard for sexual assault kit sample assessment consistent with nationally recognized standards. Rather than taking weeks to screen and differentially extract several cases, the same will be achieved in approximately 2 days. Upon completion of screening, the DNA will already be extracted and ready for amplification. The expected result is higher throughput of SAKs while decreasing the overall back log and analytical turn-around time of the RFSC.

**Requirements from Sedgwick County:** The grant requires that metrics be tracked and reported semi-annually. Sample throughput, turn-around-time, backlog, and number of CODIS entries/hits are among the metrics that must be provided. The data collected during the grant period must be available for review three (3) years post award. The County must comply with standard federal grant requirements including those found in the attachment section under "Certifications Regarding Lobbying: Disbarment, Suspension and Other Responsibility Matters; and Drug-Free Workplace Requirements" and "Standard Assurances."

**Alternatives:** Do not apply for these funds and appropriate equal funds from the existing County budget to address this need for the upgrade of equipment and implementation of new software and technologies and hiring one staff member.

**Policy considerations:** None

**Legal considerations:** None