## GOVERNMENT OF THE DISTRICT OF COLUMBIA Department of Forensic Sciences



## FY2015-16 Department Of Forensic Sciences Council Performance Oversight Hearing

Testimony of Dr. Jenifer A.L. Smith Director

Before the

Committee on the Judiciary

Council of the District of Columbia

March 3, 10:00 AM Room 120 John A. Wilson Building 1350 Pennsylvania Avenue, NW Washington, D.C. 20004 Good afternoon Chairperson McDuffie, Councilmembers and guests I am pleased to testify before you today on the Department of Forensic Sciences' FY 2015-16 Performance.

The Department of Forensic Sciences began fiscal year 2015 facing a complaint from a critical stakeholder, the United States Attorney's office, concerning the interpretation of DNA testing results from the Forensic Biology Unit (FBU). In January, the USAO stopped sending new DNA cases to the lab and commissioned an audit to review the DNA lab's work. At the same time, Mayor Muriel Bowser commissioned an external organization, the ANSI-ASQ National Accreditation Board (ANAB) to audit and review the procedures and processes used by the lab. In April, 2015 following two unfavorable reports from the USAO's audit and the Mayor's audit, Mayor Bowser moved swiftly to suspend DNA testing within the Forensic Biology Unit and initiated a 30 day corrective action plan for all of DFS' work. She also appointed Dr. Roger Mitchell, Chief Medical Examiner, to act as Interim Director for DFS and she moved \$1 million dollars to the DFS budget to address identified deficiencies and to continue the work of DNA analysis through an external private laboratory. I was brought on shortly thereafter as a consultant to review the situation and to develop a path to re-open the FBU. Working with the remaining DFS managers, we conducted a root cause analysis and produced several recommendations to bring the FBU back to compliance within the National DNA standards. An extensive six-month training program was initiated. In June, the ANAB returned to assess the DFS internal review team's plan. They assessed other DFS units to determine whether or not the corrective action plan was sufficient to preclude ANAB from suspending the Forensic Science Laboratory's ISO 17025 accreditation. Upon conclusion of the physical assessment, ANAB approved and accepted the Department's corrective action plan, they cited no nonconformities and made no changes to the department's ISO accreditation

certification. This endorsed the beginning of a new "way forward" for not just the Forensic Biology Unit but for the entire Department of Forensic Sciences.

In July of 2015, as Acting Director of the Department, I focused my initial efforts on:

- Strengthening communication and collaboration between the Department and key agencies while maintaining our scientific integrity and independence
- Emphasizing strong management and fiscal responsibility, ensuring the workforce has the necessary training, tools and infrastructure to perform their duties efficiently and effectively
- and conducting and delivering the highest quality testing and results

In my remarks today, I will speak to several major DFS accomplishments:

- successful implementation of a Laboratory Information Management System (LIMS);
- re-initiation of DNA testing and increased productivity in the Forensic Science Laboratory Division;
- growth within the Crime Scene Sciences Division; and
- continued quality analysis in the Public Health Laboratory Division
- implementation of procedures to address complaints and concerns

Previously the DFS reported metrics using the "Foresight" approach tracking these statistics using Excel spreadsheets. This approach did not provide the seamless, real-time, robust data and effective evidence tracking that a lab of our size demands. Upon my arrival, and due to a collective effort of the agency, our LIMS was effectively launched on October 1<sup>st</sup>. To date the LIMS system continues to keep track of all cases and evidence items received by DFS. I intend to use this system to provide meaningful insight concerning the productivity of all units within the laboratory.

As I previously stated, in June all DNA analysts within the FBU began an intensive, fulltime, training program that was conducted by national and international experts in DNA mixture analysis. This training involved class instruction, practical exercises and take home assignments. Several weeks of validation studies of the STRmix software were completed in December and the ANAB returned to conduct an external audit concerning compliance with the National DNA Standards. No substantial issues were raised in that audit.

Following completion of their training, DNA analysts had to demonstrate competency by successfully completing written and oral testing as well as moot court testimony. In January, ANAB was provided our validation studies, new protocols and procedures as well as the training, assessment and competency testing records of FBU analysts. On February 17, 2016 the ANAB provided a memo that stated: The additional site visits and document reviews are complete. All corrective actions and remediation for your agency have been reviewed and deemed appropriate. The training of the analysts and implementation of STRMix is appropriate to deal with mixture interpretations in forensic casework in your agency. Effective dated above the laboratory is ready to resume DNA forensic casework. Upon receipt of this memo, the FBI's (CODIS) administrator gave approval to DFS to upload DNA profiles into National DNA Index (NDIS). The next day, February 18th, DFS informed all stakeholders that DNA testing was restarting and we became the seventh laboratory in the United States to implement STRmix. FBU began the process to enter profiles into CODIS that day. FBU will initiate testing this month, starting with sexual assault kits. Contracts with private laboratories will remain in place to handle additional cases. I would like to recognize the FBU scientists for their dedicated effort to transform DNA mixture interpretation at DFS. We are no longer lagging but leading in the field of forensic DNA testing.

Importantly, throughout this transformational period, DFS ensured that DNA analysis of evidence continued. With the contingency funding provided by Mayor Bowser, outsourced DNA testing started in May with approximately 75 backlogged sexual assault kits. The first two contracts, initiated after the suspension, were required to address sexual assault kits only, in an attempt to clear out the sexual assault kit backlog, which had reached over one hundred and thirty cases as of April 2015. Of those 135 sexual assault kits, ninety five were over 90 days old. Later contracts allowed for testing of all DNA samples and the current contract extended the work to two additional laboratories. In FY15 DFS outsourced 415 cases at a cost of \$523,831. During this time frame we also reduced the average turn-around time of sexual assault kits from 173 days to 73 days.

Two public forensic laboratories, the Erie County Central Police Services Forensic Laboratory and the Los Angeles County Sheriff's Department assisted DFS by uploading suitable DNA profiles into the NDIS. These laboratories uploaded a total of 51 profiles which resulted in 18 NDIS hits to other investigations.

In October 2015, Mayor Bowser provided 8 million dollars to supplement the FY16 DFS budget. Under her Safer, Stronger DC initiative, DFS received 4.3 million dollars to alleviate case backlogs in the Firearms Examination Unit (FEU) and Latent Fingerprint Unit (LFU) of the FSL Division in addition to supporting outsourcing contracts in FBU. Both units have applied these resources to work backlogged cases through the system more efficiently. Specifically, in LFU, the contractors' support during LIMS implementation allowed fingerprint analysts time for LIMS training. The contract assistance was vital to ensuring priority cases were completed in a timely manner. Collectively, these contractors have been able to produce about 140 case reports in the last three months.

DFS continues to participate in critical national intelligence databases sponsored by federal law enforcement agencies such as the FBI and ATF. DFS analysts, within the Firearms Examination Unit (FEU), contributed information to the National Integrated Ballistic Information Network (NIBIN) and analysts within the Latent Fingerprint Unit (LFU) utilize Automated Fingerprint Identification System (AFIS). DFS has seen steady increases in both NIBIN and AFIS entries and hits since the addition of the in house contractor support.

The Crime Scene Sciences Division (CSS) is responsible for the collection and preservation of evidence from crime scenes in the District of Columbia and the storage and distribution of evidence while it is present within the department. These services are provided 24 hours a day, 7 days a week, 365 days a year. CSS consists of two units, the Crime Scene Sciences Unit (CSU) and the Central Evidence Unit (CEU). Currently, crime scene processing within the District is handled jointly by MPD's CSID and CSSU personnel. Last fiscal year, CSSU personnel processed 519 vehicles and 1777 crime scenes. As of February 25, 2016 DFS CSSU began supporting homicides investigations with MPD's CSID personnel.

The Mayor's Safer, Stronger DC initiative provided \$3.7 million in FY16 to hire 31additional CSSU personnel for crime scene processing. Following the recent passage of the emergency legislation allowing DFS to hire retired MPD officers without affecting their pensions, DFS hopes to attract experienced candidates and draw from retired or retiring MPD officers to fill senior level positions as their experience will benefit the District and the mission of our agency.

All new CSS staff will attend a seven week training course that will support a full complement of forensics applications, collection, preservation techniques, and processes in support of any crime scene. These new hires will undergo one-on-one training, mentoring, and support from the Supervisor(s) and trained staff, to ensure the highest level of quality is provided to the District

The third division of the Department of Forensic Sciences is the Public Health Laboratory (PHL) that conducts a variety of testing in support of public health decision makers. The PHL maintains the District's Tier 1 Division of Select Agents and Toxins (DSAT) laboratory to include a Biosafety Level 3 (BSL-3) lab space. PHL has both the competency and capacity to test for pathogens to include any emerging diseases. Additionally PHL has the certified, Tier 2 Chemical Terrorism (CT) exposure laboratory. This group has been working with the Department of Energy and the Environment (DOEE) and DC Water to establish an Environmental Testing Laboratory as well as creating methods and procedures for testing of synthetic cannabanoids. PHL chemists have been instrumental in the implementation of forensic chemistry as a DFS capability.

This year the PHL worked with officials from the Department of Health concerning an outbreak of Salmonella at a major restaurant. Additionally PHL announced implementation of novel procedures to detect the measles and mumps viruses in human blood. CDC recently reported that the incidence of measles and mumps is the highest it has been in over two decades. This new diagnostic tool will allow PHL to rapidly diagnose measles or mumps to assist in quickly quarantining infections, helping to avoid an epidemic.

PHL has also verified and implemented an immunological detection test for Lyme disease, a bacterial infection you get from the bite of an infected tick. This new test method allows for rapid screening of suspected cases, within the District, and will aid in the surveillance data reported to the CDC.

This week, PHL will initiate in-house testing to identify, the emerging disease, Zika virus from samples received from patients in the District. Working closely with DOH, our scientists will enhance the capability to test mosquitoes for not only West Nile virus but also, Zika, Dengue and Chikungunya viruses. We will be ready to initiate this program in the Spring to coincide with the mosquito surveillance programs at DOH.

DFS has actively engaged our external stakeholders in multiple ways that strengthens our understanding of our customers' needs without jeopardizing the scientific independence of our organizations. DFS holds regularly scheduled case review meetings with MPD and USAO to ensure case needs are met in a timely fashion and analysts are encouraged to discuss case status in order to ensure appropriate prioritization of analysis in support of on-going investigations.

DFS solicits feedback from the public and stakeholders via our website. This year we launched a new procedure for handling complaints and inquiries whether they are lodged by either internal or external sources to ensure that such issues are acknowledged and addressed in a timely fashion. All complaints deemed to be of value trigger the creation of a Quality Corrective Action or Quality Preventative Action that will be addressed via the DFS Quality Management system.

2016 continues to be a year of transformation in DFS and we are working closely with the District's Department of Human Resources to complete an organizational realignment of several positions to address emerging needs for forensic services and to ensure continuing coverage of our overarching core services: crime scene evidence collection, forensic science analysis, and public health laboratory diagnostic, analytical and emergency response testing.

Working with the management staff we have held monthly All Hands meetings designed to strengthen collaborative efforts amongst the DFS Divisions and our sister agency, the Office of the Chief Medical Examiner's Office, co-located at the Consolidated Forensic Laboratory. One third of our staff recently volunteered to work as a force multiplier with OCME in the event of a Mass Fatality in the District. Additionally we have formed several employee driven committees to address issues such as educational outreach, awards and labor management issues. We have worked to improve our relationship with the three labor unions that represent our staff and we have sought their advice on issues such our new telecommuting policy and CSS shift adjustments.

The Department has many critical initiatives in progress to ensure that we fulfil our mission to provide high-quality, timely, accurate, and reliable forensic science services with the use of best practices and best available technology; a focus on unbiased science and transparency; and the goal of enhancing public safety. Working with the talented women and men within the Department I believe our mission is within reach and attainable. The statute mandates it. The Mayor expects it, and our stakeholders and crime victims deserve it. I am here to ensure that the District's crime lab is a world-class laboratory. The Council and this Committee, led by you, Chairperson McDuffie, have been key allies in this endeavor, and I appreciate your continued efforts to ensure our agency operates efficiently and effectively. Thank you for the opportunity to testify today and I look forward to answering any questions the Committee may have.