The Department of Forensic Sciences (DFS) Science Advisory Board (SAB) WebEx meeting was called to order by Board Member Dr. Jeanne Jordan at 9:05 a.m. Roll call of Board members present, in addition to Dr. Jordan, included: Ms. Marla Carroll, Mr. John P. Jones II, Dr. LaKeisha McClary, Ms. Danielle O’Neill, Dr. Michael Pentella, Mr. Henry Swofford and Mr. Robert Thompson. A quorum was established to conduct board business.

Motion made to Approve Dr. Jeanne Jordan’s Election to Science Advisory Board Chairwoman:
- Board Member John Paul Jones II
Seconded: Board Member Danielle O’Neill
Motion to Approve Dr. Jeanne Jordan’s Election to Science Advisory Board Chairwoman Passed

Minutes from the January 15, 2021, meeting were presented and reviewed.

Board member Jones noted that the ‘conformities’ references cited twice in the first paragraph on page 3 of the meeting minutes should be replaced with ‘non-conformities.’

Motion to Approve Minutes with Correction: Board Member Marla Carroll
Seconded: Board Member Robert Thompson
Motion to Approve Minutes Passed

DFS Director Dr. Jenifer Smith began the Director’s update with an official announcement of Mr. Henry Swofford’s appointment to the Science Advisory Board. With over 15 years of experience working in an ISO/IEC 17025 accredited forensic sciences laboratory, Mr. Swofford is certified by the International Association for Identification (IAI) as a latent print examiner. Prior to serving as an independent forensic consultant, he served as Chief of the Latent Print Branch for the United States Army Criminal Investigation Laboratory (USACIL), responsible for overseeing forensic latent print operations in support of the criminal investigative mission of the U.S. Department of Defense. Earlier, he served as a Quality Assurance Manager, Research Coordinator, Physical Scientist/Latent Print Examiner for the USACIL, as well as a Laboratory Technician for the Georgia Bureau of Investigation.

The DFS Director recounted information presented during her March performance hearing before the Council of the District of Columbia Committee on Public Safety and Justice. Included among the statistical data highlights was the 86% of DFS employees who have reported to work daily during the pandemic; the Public Health Laboratory (PHL) performing 85,277 COVID-19 tests in FY20, an amount greater than 8 times more tests than the laboratory conducted in FY19; PHL Mobil Testing Unit’s visits to 12 locations more than 35 times, and the testing of more than 1,300 specimens since April. Also noted was DFS’ involvement in the District’s Strategic Plan to Reduce Opioid Use,
Misuse and Related Deaths that has resulted in the Forensic Chemistry Unit’s (FCU) identification of new trends in Opioids, fake Oxycodone pills (contain Fentanyl) and fake Xanax pills.

The Syringe Exchange Program has expanded beyond Opioid death syringes through partnerships with various syringe exchange programs. Drug surveillance has proven a good indicator of actual drug use and trends and it has been determined that Methamphetamine is at a much higher rate than previously found in death investigations.

In FY20 Crime Scene Sciences (CSS) collected 83,529 evidence items (an 8% increase over FY19 totals), received more than 8,000 crime scene service requests and processed 6,194 crime scenes. During this period, CSS transferred back to the Metropolitan Police Department Evidence Control Branch 1,100 items of potentially flammable evidence previously stored at DFS since 2014.

For the 2020 spring semester DFS developed a course in Pattern Sciences (Firearms and Fingerprint Examination) with Trinity Washington University. Initial classes were hosted at DFS and later transitioned to a virtual format for online learning due to the pandemic.

The Firearms Examination Unit (FEU) completed 5,081 NIBIN entries, resulting in 3,921 NIBIN leads and 208 NIBIN hits. Nearly 13% of all firearms recovered in the District are ghost guns. In FY19, FEU received 116 ghost guns and in FY20 306 ghost guns were received, representing a 198% increase over the previous year. Twelve of the ghost guns recovered are related to homicide cases.

In FY20, the Latent Fingerprint Unit (LFU) completed 2,944 cases with an average turnaround time of 17 days. Ninety-nine per cent (99%) of homicides and priority cases were completed within 60 days and the unit, the first to go paperless at DFS, has no current backlog. Of the 921 latent identifications, 68% had a criminal justice impact leading to an arrest, confirming identification or providing an investigative lead.

LFU Evidence Processing completed 1,880 cases with an average turnaround time of 2 days.

The Forensic Biology Unit (FBU) received 218 sexual assault kits for testing. The average turnaround time was 73 days. All testing on sexual assault kits was completed within 90 days as outlined in the Sexual Assault Victim’s Rights Amendment Act (SAVRAA), excluding four kits due to lengthy delays in obtaining permission to consume. In FY20 FBU completed 770 CODIS entries and obtained nearly 260 hits.

The Digital Evidence Unit (DEU) witnessed a 16% caseload increase from 1,147 in FY19 to 1,315 in FY20. As recipient of the 2020 Paul Coverdell Grant, totaling just under $137,000, DEU purchased Cellebrite Premium, which allows access to and collection of locked Android and iOS mobile devices. Other purchases included 2 workstations and needed supplies for processing devices.
Despite restrictions and limitations of COVID-19 guidance designed to ensure the protection and safety of staff and visitors, DFS has, to date, successfully managed hosting 27 interns throughout all DFS divisions.

Diversity and Inclusion program achievements, the road ahead and last year’s annual installment of ‘family day’ activities were briefly mentioned.

A recap of the work performed last year by the Science Advisory Board included: I) Review of Forensic Biology Unit’s Standard Operating Procedures and Next Generation Sequencing validation study consultation; II) Review of Firearms Examination Unit’s (FEU) Standard Operating Procedures, training manuals and documents review; the United States Attorney’s Office FEU complaint; III) Review of Quality procedures for Complaints and Inquiries.

Quality Assurance Update
Mr. Lyndon Watkins, DFS Quality Manager, reported that, to date, the Quality Assurance team: 1) completed 13 of 15 scheduled internal audits for FY21; 2) attended crime scene training and participated in Crime Scene Science Unit (CSSU) ride alongs; and, 3) also attended ISO 17025 auditing training and Qualtrax Administrative User Training. During the first two quarters of FY21, the QA team completed 35 QCARS comprised of 6 Quality Corrective Action Reports issued to Crime Scene Sciences: 3-CSSU, 3-Central Evidence Unit (CEU); 6 reports issued to the Forensic Science Laboratory: 4-FEU, 2-LFU, and a total of 23 reports issued to the Public Health Laboratory: 6-Assensioning, 4-Immunology, 3-Microbiology, 5-Clinical Toxicology, 2-BioTerrorism, 3-Molecular Diagnostics. Quality completed 11 QCARS during the same period in FY20.

A timeline review of the laboratory’s accreditation suspension by ANAB was reported to have commenced April 2, 2021. DFS responded to ANAB April 3rd seeking clarity and guidance and subsequently notified ANAB on April 8th of DFS’ intent to file an Appeal. On April 12th ANAB informed DFS that during the Appeal process, DFS’ accreditation will be withdrawn May 2nd, 2021, and ANAB sends the Appeal process procedure to DFS. As of this date (April 30th), the DFS Appeal is in process of being submitted prior to the May 2nd deadline.

In response to Board member Jones’ inquiry regarding the status of DFS examiners and scientists currently providing scientific services, Dr. Smith stated that the Crime Scene Sciences Division (CSSD) is not affected by the accreditation suspension, just as the Public Health Laboratory, and that evidence collections by CSSD have continued. Central Evidence Unit (CEU) operations are continuing, Opioid surveillance is on-going, as is proficiency testing, training, audits, validations and verifications. Staff are also assisting with ensuring that evidence reaches contract laboratories. Regarding Board member Jones’ question whether QCARS are shared publicly, Dr. Smith indicated that the information is not shared with others aside from the SAB, Office of the Attorney General and the US Attorney’s Office, when the QCARS are finalized. However, names are not included with QCARS as it is believed to be a ‘systems issue to correct.’ DFS leadership chose not to respond to Board member Jones’ inquiry concerning media reports and claims of DFS mismanagement issues
until the Board and DFS leadership convenes the scheduled Closed Executive Session.

Board member Thompson asked DFS leadership whether there is a clear process for rehabilitation to ensure confidence in the lab and the answering of issues for reaccreditation recovery is known and, if so, whether the laboratory has instituted plans for reaccreditation. Dr. Smith acknowledged that it is certain that the laboratory will lose accreditation May 2. However, it is important to ensure that the citizens trust the staff and laboratory and that the appeal process will allow the lab to engage in dialogue that communicates ‘how’ and ‘why’ the loss of accreditation occurred and an investigation. The SAB will be consulted for advice regarding laboratory needs during the rehabilitation efforts.

Dr. Luke Short, Interim Public Health Laboratory (PHL) Director reported that as of April 26, 2021, PHL has conducted 245,633 molecular COVID-19 tests and 7,265 serological tests, noting a reduction in positivity results. Dr. Pushker Raj, Immunology/Virology Unit Chief, has pulled together a SARS-CoV-2 (SC2) study demonstrating the capability to detect CoV-2 infection through testing for spike in glycoprotein S antibodies, as well as nucleocapsid protein N.

The PHL has expanded its capability in SARS-CoV-2 (SC2) sequencing and has now sequenced 413 samples. Currently, 886 publicly available sequences for the District are in GISAID, an open access SC2 database used for real-time genomics surveillance. To date, the PHL has submitted 385 of 501 sequences submitted to CDC and has been recognized among the top ten in the country in the percentage per population in CDC submitted sequences. Dr. Short reported that the laboratory’s sequencing will not end with SARS-CoV-2 as the work toward greater expansion and capacity will be useful with other viruses in the future.

The following are among the SC2 Variants of concern for which there is evidence of an increase in transmissibility, more severe disease reduced effectiveness of treatments or vaccines, or diagnostic detection failures:

<table>
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<tr>
<th>Variant of Concern</th>
<th>Area</th>
<th>Variant Originated</th>
<th>Total sequenced by DFS</th>
<th>Total reported in DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.1.1.7</td>
<td>UK</td>
<td></td>
<td>35</td>
<td>123</td>
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<td>P.1</td>
<td>Brazil:</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>B.1.351</td>
<td>South Africa</td>
<td></td>
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<td>7</td>
</tr>
<tr>
<td>B.1.427</td>
<td>California</td>
<td></td>
<td>0</td>
<td>12</td>
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<td>B.1.429</td>
<td>California</td>
<td></td>
<td>4</td>
<td>22</td>
</tr>
</tbody>
</table>

Following are among the SC2 Variants of interest with specific genetic markers that have been associated with potential diagnostic impact or predicted increase in transmissibility or disease severity:

<table>
<thead>
<tr>
<th>Variant of Interest</th>
<th>Area</th>
<th>Variant Originated</th>
<th>Total sequenced by DFS</th>
<th>Total reported in DC</th>
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</thead>
<tbody>
<tr>
<td>B.1.525</td>
<td>New York</td>
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<tr>
<td>B.1.526</td>
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<td></td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td>P.2</td>
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<td>1</td>
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</table>
The PHL continues to be fully engaged in the monitoring of drug use in the District in order to identify potential trends. Opioid surveillance has been approved for grant funding of $445,500 to DC Health for services received by the Department of Behavioral Health in support of clinical drug testing to improve treatment programs and public health surveillance in the District. A review of the PHL’s instrumentation and drug screening capability for DBH was briefly discussed.

Jessica Beckman, Latent Fingerprint Manager, and Andrew Reitnauer, Technical Lead Scientist (Fingerprint), conducted a Latent Fingerprint Unit (LFU) update that included a comprehensive review of two Quality non-conformities identified and reported to the board earlier this year.  

**QCAR #1** Examiner’s discovery of original sufficiency results that she disagreed with while working a supplemental case of additional comparisons against known individuals. Two reports issued with different results using the same evidence items was self-reported by Latent Fingerprint Examiner.  

**Root Cause Analysis** - No Value evidence was not verified; Mideo SOP not followed; Lack of documentation to support No Value results.  

**QCAR #2** Not all digital photos within the Mideo Caseworks platform (evidentiary imaging database) were opened by the Latent Fingerprint Analyst (presently in an individual training plan with Technical Lead Scientist Reitnauer).  

**Root Cause Analysis** - Evidentiary images in question were not opened due to an incomplete understanding of the Mideo Caseworks process digital capabilities of the filmstrip view and workspace for the analysis of digital images. LFU’s Manager, Technical Lead and DFS Quality Manager, Lyndon Watkins, reviewed the timeline and corrective action steps taken to mitigate LFU’s QCARS and to prevent future occurrences and received the Board’s assessments, strategies and improvement recommendations (training, cross-referencing SOPs) during an extensive discussion concerning LFU Quality issues and policies and procedures. At present, LFU is awaiting receipt of the Board’s feedback following review of LFU’s new SOPs and new forms.

LFU is actively undergoing an internal 360 review of the laboratory operations, personnel, procedures and equipment to determine how efficient and effective the many changes (transition to paperless, incorporating new software in casework, etc.) have been and whether refinement is needed to improve quality and customer service.

At 12:03 p.m., the Board Chairperson Jordan called for recess of the Science Advisory Board meeting.

The Board meeting resumed at 12:45 p.m., at which time the Board Chairperson conducted roll call and Motion was moved and seconded to enter into Closed Executive Session for deliberation to Discuss Investigation of ad hoc Audit Report Allegations.

At 2:34 p.m. the Board’s public meeting resumed and was called to order. Board Chairperson Jordan conducted roll call of Science Advisory Board members.

The meeting adjourned at 2:36 p.m. An audio recording of the meeting is available upon request.