The Department of Forensic Sciences (DFS) Science Advisory Board (SAB) meeting was called to order by board chairman Peter Marone at 9:18 a.m. Board members present included Mr. John Paul Jones II, Dr. Jeanne Jordan, and Mr. Robert Thompson. Dr. Simone N. Gittelson and Dr. Michael Pentella participated in the meeting via WebEx conferencing. A quorum was established to conduct board business. Minutes from the January 18, 2019, meeting were presented and read.

**Motion to Approve Minutes**

- Board Member Jordan
- Seconded: Board Member Gittelson

**Motion to Approve Minutes Passed**

DFS General Counsel Rashee Raj reported the March 1, 2019, final publishing of the Science Advisory Board’s rulemaking.

General Counsel Raj participated in forensic laboratory counsel training in Richmond, VA during which topics covered included investigative genealogy, PCAST, familial searching and Brady/Giglio compliance with personnel files, as it relates to quality corrective action reports.

Earlier this year, DFS was ordered by a Superior Court judge to produce all case-related QCARS covering the near 7-year period DFS has been in operation. A survey conducted by DFS uncovered 15 QCARS, involving 20 DFS employees. No explanation of the ex-parte conversation was issued and no details were received from the judge or the defense counsel as to why the information was needed. According to DFS General Counsel Raj, no questions were asked concerning the QCARS at the conclusion of the trial.

The board was informed that DFS is considering the posting of QCARS on line, as currently done by the Houston Forensic Science Center, with which distinct QCAR categorical searches and sorting are made possible. DFS leadership reminded the board that the department discontinued including employee names on QCARS, as identification of the quality issue and addressing the quality issue is of greater significance. Dr. Jenifer Smith further emphasized that at DFS, “QCARS are quality corrective actions for system change.”

The Forensic Science Laboratory (FSL) and the testing units within the division, that includes the Firearms Examination Unit (FEU), Latent Fingerprint Unit (LFU), Forensic Biology Unit (FBU), and the Digital Evidence Unit (DEU), and the Forensic Chemistry Unit, under the Public Health Laboratory, all currently have 17025, 2005 accreditation. The units are slated to move to 17025, 2017 accreditation August 1, 2019. Documents will be sent to ANAB for assessment in off-site surveillance.

Considerable effort is geared toward accreditation of Evidence Processing, formerly referred to as Chem Lab. Designated for evidence receipt, latent fingerprint processing and limited swabbing, Evidence Processing is tentatively scheduled for pre-assessment late June 2019, and potentially an on-site assessment late August/September 2019.
No complaints were received during the last quarter. The only inquiry received originated from an immigration law firm seeking drug testing information from a 1995 Metropolitan Police Department (MPD) arrest. The firm was referred to MPD and the Office of the U.S. Attorney.

A review of the Forensic Biology Unit’s road to Next Generation Sequencing was conducted, encompassing the guidelines, addendums and standards timelines, the progress made, procuring contractor validation support by Verogen and the hurdles ahead to implementation.

DFS Director Jenifer Smith reminded the board that the current STR typing system, which requires multiple kits to maximize DNA typing information, is ineffective on degraded samples and lacks the potential for developing investigative leads. While CODIS hits assisted the investigation in 62% of Metropolitan Police Department cases, the laboratory witnessed 38% in unresolved cases having only a profile, despite the efficiency of CODIS linkages.

The board was introduced to Kristy Hopkinson, Forensic Biology Unit (FBU) Acting Unit Manager, Laura McBean, FBU Lead Scientist and other FBU NGS team members dedicated to the NGS project: Susan Welti, FBU Technical Leader and Forensic Scientists Jessica Skillman and Stephanie Hickey. Ms. Hopkinson conducted a status review of the five NGS project’s five phases to implementation including, in part, Phase 1 (Quarter 1) Validation planning, training; Phase 2 (Quarter 2) SWGDAM interpret document, draft SOPs; Phase 3 (Quarter 3) Sensitivity study, unit presentations, mixture study; Phase 4 (Quarter 4) Training and decisions for statistics, mock casework study, finalize SOPs and worksheets; Phase 5 (Quarter 1) Moot court and stakeholder training, Implementation. Having completed the repeatability and reproducibility study, unit presentations and discussions with other interested NGS labs, the team is on course to conclude Phase 3 upon completion of the sensitivity study, writing and reviewing of the second validation report, presently in progress, writing SOPs and worksheets and issuing notification to DFS Stakeholders before proceeding to Phase 4.

The DFS operating budget for fiscal year 2020 is $30,305,499, funding 227 full-time employees.

Dr. Anthony Tran, Director of the Public Health Laboratory, reported that all senior staff positions within the division have been filled and that a number of contractors have been acquired, supported by local funding, the Laboratory Capacity Cooperative Agreement and the CDC Opioid Cooperative Agreement. The additional resources are added reassurance of meeting the laboratory’s needs.

The Public Health Laboratory is back online with Zika testing. All protocols, verifications and forms are uploaded onto Qualtrax and ready for use. Board members Jordan and Pentella will receive protocols and forms for review. Additionally, the lab is online with a commercially available 2-hour test for norovirus in support of the D.C. Health Department’s investigations for potential outbreaks of norovirus. Recently, the laboratory assisted with an outbreak occurring at Saint Elizabeth’s Hospital located in the District where few patients were found, via Sanger Sequencing, to have norovirus stemming from an outside food service brought into the hospital.
The DFS Health and Safety team has joined the Public Health Laboratory under a reorganization at the department.

For fiscal years 2018/2019, to date, PHL’s Forensic Chemistry Unit (FCU) analyzed 1181 exhibits for the U.S. Attorney’s Office, Narcotics and Special Investigations Division, Office of the Chief Medical Examiner and the D.C. Department of Corrections. Of these, 969 exhibits were criminal investigation affiliated and 212 surveillance samples accounted for non-court bound cases, for which a fully accredited method for testing was conducted and reported. Engagement with stakeholder agencies and the intelligence community continues as the lab facilitates awareness in the discovery of new synthetic opioids and new synthetic cannabinoids. The unit has acquired a Geographic Information System (GIS) which supports finding where controlled substances originate and enables pattern tracking and map trends and the identification of potential hotspots, information that may potentially impact decisions made by policy makers.

The Forensic Chemistry Unit (FCU) addressed, accepted and deemed helpful recommendations and suggestions submitted by the board’s FCU review committee (J.P. Jones, Robert Thompson) after review of FCU’s SOPs and training manual.

Board member Jones mentioned that DFS may consider addressing in training protocols items identified in a new training standard, E2917, for all forensic science practitioners, anticipated to be heavily promoted by OSAC in the future.

**Motion by:** Board Member Thompson  
**Motion:** Documentation in response to the advice of the Forensic Chemistry Unit (FCU) Review Committee is accepted.

**Motion Seconded by:** Board Member Jones

**Motion Passed**

Board Chairman Marone requested a spreadsheet identifying SAB action, literature review and SOP review.

Board member Jones will submit to DFS Deputy Director Graham, at the earliest time possible, the Digital Evidence Unit (DEU) review committee’s (NIST) SOP reviews. DFS will respond to comments by mid-June.

Director Smith proposed that DFS conduct a 3D imaging technology briefing for the board during the next scheduled SAB meeting.

Chairman Marone proposed a lab tour for SAB members.

Board member Jones inquired about how the SAB may assist DFS in the retention of firearms examiners. DFS leadership suggested that encouraging the improvement in pattern recognition as well as encouraging...
students in forensics to consider pattern recognition disciplines would bring about awareness presently not well covered in most university programs. Additionally, training and the referral of resources (equipment) would be welcome support for DFS.

Board vacancies and board member discipline were briefly discussed.

The board agreed to convene the final meeting of 2019, Friday, October 18th.

The meeting adjourned at 12:15 p.m.

An audio recording of the meeting is available upon request.