The Department of Forensic Sciences (DFS) Science Advisory Board (SAB) meeting was called to order by board chairman Peter Marone at 9:13 a.m. Roll call of Board members present, addition to the Board Chairman, included: Ms. Marla Carroll, Mr. John P. Jones, Dr. Jeanne Jordan, Ms. Danielle O’Neill and Mr. Robert Thompson. Dr. Michael Pentella participated by way of WebEx conferencing. A quorum was established to conduct board business. Minutes from the July 26, 2019, meeting were presented and read.

**Motion to Approve Minutes**: Board Member Jordan  
**Seconded**: Board Member O’Neill  
**Motion to Approve Minutes Passed**

On behalf of Acting Deputy Director Karen Wiggins, the Quality update was presented by Mr. Abdel Maliky, Forensic Intelligence Manager, whom also serves as acting Quality and Training team leader. Mr. Maliky reported no findings associated with the Forensic Science Laboratory’s (FSL) Forensic Biology Unit’s (FBU) August 14 through 16 ANAB on-site surveillance. This represents the fourth consecutive year the FBU has no findings in an FBI QAS audit. Also during this period, a pre-assessment for accreditation of Evidence Processing (Latent Fingerprint Unit) was conducted. Late August an off-site surveillance visit by ANAB for 17025 2017 accreditation of the Latent Fingerprint, Digital Evidence, Forensic Biology Unit and Forensic Chemistry Units yielded one non-conformity relating to the inclusion of the start and end dates on reports issued DFS stakeholders. The single finding was resolved and the continuation of accreditation was granted September 24, 2019.

Dr. Julia Kiehlbauch, Manager, Microbiology Unit, Public Health Laboratory (PHL), conducted an introductory review of the laboratory’s testing activities associated with carbapenem-resistant organisms, including detection, species identification, prevention, containment and CDC ARLN (Centers for Disease Control and Prevention Antibiotic/Antimicrobial Resistance) alerts designed to provide rapid containment and prevent spread.

The Public Health Laboratory has seen an increase from 1% positivity to 9% positivity for West Nile Virus detection during the 2017 to 2018 season in the lab’s mosquito arboviral testing. For the 2019 season the laboratory received and tested 299 mosquito pools, resulting in 4% positivity for West Nile Virus. During the 2018-2019 summer influenza season, the Public Health Laboratory has seen 4% positivity among the tested 250 selected samples submitted from local hospitals. 1023 specimens were tested during last year’s season compared to 370 during the 2017-2018 season. Testing results are reported to the D.C. Department of Health in support of the department’s strategies for mosquito control.

A review of PULSENET, the National laboratory network designed to detect foodborne-related outbreaks and its transitioning to Whole Genome Sequencing (WGS) was briefly discussed. The
Public Health Laboratory has been certified by CDC to run organisms through WGS and to submit data to the CDC database. Presently, the PHL team is in the process of developing a report that communicates the data. Dr. Kiehlbauch also provided a briefing of CDC’s national norovirus outbreak surveillance network, CaliciNet. Funded by cooperative agreement with CDC, the surveillance network facilitates comparison of local strains to a national database, identification of newly emerging norovirus strain and linking of outbreaks to common sources. While Dr. Kiehlbauch reports that PHL is now certified in Q4, she admits the laboratory having faced sequencing challenges. Board member Pentella recommended and DFS Director Dr. Jenifer Smith supported the idea of a joint discussion of lab issues in common between the PHL and the University of Iowa ‘epi’ teams.

The Forensic Chemistry Unit (FCU) is continuing to perform analysis of submitted drug samples as well as expand its surveillance project. The laboratory has witnessed benefits and discovery resulting from the drugs brought into the District. More recently, there has been a shift in the increasing amount of work done for synthetic opioids in comparison to other casework performed. Half of the Heroin seen by the lab is found to be fentanyl or fentanyl analog that poses an even greater danger. In line with the FCU’s laboratory Intel outreach, these findings and others are pushed out to various agencies, including the National Capital Region Threat Intelligence Consortium (NTIC) and the Office of the Attorney General (OAG), as well as to the user community as an alert of the potential danger and threats. The importance of the work done by FCU has led to the placement of permanent embedded NTIC personnel within the unit.

In addition to reviewing FCU’s synthetic opioid surveillance program, Dr. Luke Short, Chief conducted a briefing of the unit’s Vape testing (of cartridges for the past year), synthetic cannabinoids surveillance program, identification of cannabinoids detected in the District, mapping geographic tracking, trends and impact. More recently, the unit has initiated involvement with the District’s Overdose Detection Mapping Application Program (ODMAP) that provides near real-time suspected overdose surveillance data across jurisdictions to support public safety and public health efforts to mobilize an immediate response to the sudden increase or spike in overdose events. FCU is hopeful to become ODMAP’s pilot lab for lab-based data in approximately 8 months to one year.

PHL’s Toxicology Unit is now the Clinical Toxicology Unit to reflect restructuring and expansion that includes drugs of abuse and clinical specimens.

Andrew Reitnauer, Technical Lead Scientist, Fingerprint, led a discussion of Latent Fingerprint SOPs and comments submitted by the Board after reviewing Latent Fingerprint protocols. The LFU expressed gratitude for the Board’s willingness to dedicate time to providing an analysis of the documents and reported plans to incorporate a number of protocol changes based on the Board’s recommendations.
The Board expressed interest in continuing the discussion concerning sufficient safeguards from the exposure and danger of controlled substances for analysts, validation’ versus ‘QC testing’ and documentation to support having conducted or not having conducted an AFIS search. The Forensic Science Laboratory is expected to issue a position statement addressing these issues.

The order of testing evidence was discussed and DFS Director Smith proposed that the DFS Forensic Intelligence Unit (FIU) brief the Board on the laboratory’s procedural processing of evidence.

Current Board vacancies include one forensic biology position and one chemistry position.

Forensic Biology Unit (FBU/DNA) protocols review is scheduled for January 2020. Firearms Examination Unit (FEU) protocols review is scheduled for April 2020.

Board members Jones and Thompson agreed to identify at least two subject matter experts to assist with review of forensic biology protocols.

Forensic Science Laboratory Director Wayne Arendse presented an overview of the June 10, 2019, Daubert hearing and its ruling concerning the admissibility of expert testimony. DFS was found to have met one of five qualifying elements with regard to the single case presented. Director Smith proposed that DFS forward to the Board hearing transcripts and other related information for review, recommendation and consideration for comment or response of record. Board member Thompson expressed uncertainty about whether the board could effectively address any portion of the Daubert ruling.

The next Board meeting convenes Friday, January 17, 2020.

The Board Chairman adjourned the meeting and the Board’s executive session immediately began at 12:25 p.m.

An audio recording of the meeting is available upon request.