1 2	Final - Minutes Scientific Advisory Committee Meeting
3	October 16, 2015
4	Department of Forensic Science, Central Laboratory, Classroom 1
5	
6	Committee Members Present
7	
8	Randall E. Beaty
9	Maureen C. Bottrell
0	Leslie E. Edinboro, Ph.D.
1	Jo Ann Given
2	Linda C. Jackson
3	Richard P. Meyers, Chair
4	Alphonse Poklis, Ph.D.

- 15 Jami J. St. Clair
- 16 Kenneth B. Zercie
- 17

#### 18 Committee Members Absent

- 19
- 20 Robin W. Cotton, Ph.D.
- 21 George Maha, Ph.D.
- 22 Carl A. Sobieralski
- 23 Travis Y. Spinder
- 24

### 25 Staff Members Present

- 2627 Wanda W. Adkins, Office Manager
- 28 D. Jeffrey Ban, Central Laboratory Director
- 29 Sabrina Cillessen, Physical Evidence Program Manager
- 30 Jennie Duffy, Breath Alcohol Section Supervisor
- 31 Bradford C. Jenkins, Biology Program Manager
- 32 Melissa S. Kennedy, Calibration and Training Program Manager
- 33 Alka B. Lohmann, Technical Services Director
- 34 M. Scott Maye, Chemistry Program Manager
- 35 Carisa M. Studer, Legal Assistant
- 36

### 37 Call to Order

38

Richard P. Meyers, the Chair of the Scientific Advisory Committee ("Committee" or "SAC"),called the meeting of the Committee to order at 9:06 a.m.

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# 42 <u>Adoption of Agenda</u>43

44 The Chair asked if there were any additions or changes to the draft agenda for the meeting.

- 45 Director Jackson asked that the Committee add future Department of Forensic Science ("DFS"
- 46 or "Department) projects as an item under Other Business. Ms. Given moved to adopt the agenda

with the addition of future projects as an agenda item, which was seconded by Dr. Poklis, andadopted by unanimous vote of the Committee.

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### 50 Adoption of Minutes

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The Chair asked if there were any changes or corrections to the draft minutes from the May 12, 2015 meeting. Ms. St. Clair noted typos on page 2 of the minutes and asked that they be corrected. Mr. Zercie moved to adopt the minutes from the May 12, 2015 meeting with the specified corrections, which was seconded by Ms. Given, and adopted by unanimous vote of the Committee.

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## 58 <u>Chair's Report</u>59

The Chair welcomed the Committee members and thanked them for their attendance. The Chair informed the Committee that Dr. Planz's term on the SAC had expired and that he had not sought reappointment. The Chair advised that Dr. George Maha was recently appointed to fill the Population Geneticist seat on the Committee vacated by Dr. Planz. Dr. Maha is expected to attend meetings beginning in 2016.

65

## 66 **DFS Director's Report**

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68 <u>Agency Events:</u>

69 Director Jackson shared with the Committee the Department's new brochure and noted that a 70 copy was included in the materials provided to each member.

71

72 Director Jackson informed the Committee of the changes to the DNA Data Bank statute that 73 went into effect July 1, 2015. The law requires adults convicted of nine additional misdemeanor 74 offenses to provide samples for the DNA Data Bank. The additional offenses include: violation 75 of protective order, stalking, violation of stalking protective order, infected sexual battery, 76 unauthorized use, unlawful entry, indecent exposure, obscene sexual display, and resisting arrest. 77 The Department has seen an increase in submissions to the DNA Data Bank since the additional 78 misdemeanor offenses were added to the statute. Funding was included in the Department's 79 budget for additional kits and supplies. Additional staff is not needed at this time.

80

81 Director Jackson updated the Committee on the status of the PERK Inventory project. Since the 82 Committee last met, the PERK Inventory Report was submitted to the General Assembly on July 83 1, 2015. Subsequent to submission of the report, an agency provided DFS with an updated 84 inventory and pointed out that the instructions for completing the inventory form may have been 85 unclear with regard to which PERKs were required to be counted for the inventory. When DFS 86 staff looked back at the materials, they concluded that, if the instructions for completing the form 87 were read in isolation without any of the other information that was disseminated, they could 88 have been misinterpreted as only seeking PERKs for calendar year 2013.

89

90 In light of the issue regarding the inventory form instructions, DFS contacted all agencies to

91 advise of the potential confusion with the instructions and ask that they review their inventory, 92 revise it, if needed, and return any updates to DFS by Monday, October 5<sup>th</sup>. The Department is in the process of reviewing the new data. An updated PERK inventory report will be submittedto the General Assembly.

95

96 Director Jackson also advised the Committee that a PERK Work Group was formed and had its 97 first meeting on September 17, 2015 at the Central Laboratory. Secretary of Public Safety and 98 Homeland Security Brian Moran is the Chair of the Work Group. Members include First Lady 99 Dorothy McAuliffe and representatives from victim advocacy groups, Commonwealth's 100 Attorneys, the criminal defense bar, law enforcement, DFS, and forensic nurses.

101

The Work Group created four subcommittees (Hospital/Collection Issues, Law
Enforcement/Submission Issues, Testing/Data Bank Issues, and Victim Consent/Notification
Issues). The Subcommittees will meet and report recommendations back to the full Work Group
at its next meeting scheduled for October 23, 2016.

106

107 Director Jackson updated the Committee on the status of the Laboratory Information 108 Management System (LIMS) project. On July 23, 2015 DFS awarded a contract to a vendor to 109 upgrade the current LIMS to a newer version. Work on the system began on August 3, 2015, 110 and it is scheduled to "Go Live" by March 31, 2016. The project must be completed by July 111 2016 when the current server reaches its end of life. Phase II of the project will include new 112 features such as pre-submission data entry for evidence, and electronic distribution of 113 Certificates of Analysis. The system will not immediately include electronic case file record 114 keeping.

115

116 Director Jackson gave an overview of DFS staffing, comparing August 2014 (DFS had 269 filled 117 positions with 26 positions in recruit) and August 2015 (DFS had 261 filled positions with 28

positions in recruit). The Department's Maximum Employment Level is 310 positions. Director

119 Jackson noted the decrease in full-time and part-time support staff were the result of required

- 120 budget reduction strategies.
- 121

During the 2015 General Assembly Session, the Department was allocated funds to restore funding for eight scientist positions that had been either eliminated or held open in FY15. DFS is currently in the process of refilling these positions. Director Jackson noted that two of the scientist positions restored in the FY16 budget were in Digital and Multimedia Evidence (DME). The two DME scientists had accepted trainee positions in another section, but were transferred back to DME, which allowed for the reinstatement of video enhancements effective June 23, 2015.

129

Director Jackson updated the Committee on the historical case file project. DFS is in the process of hiring two wage employees to scan portions of the archived case files (1973-1995) not in the laboratory information management system (LIMS). There is funding for up to four wage employees. In addition to the scanned Certificates of Analysis, searchable case information will be captured, which should be able to be transferred into the upgraded LIMS. There are approximately one million case files to be scanned. The database is currently undergoing testing.

137 Director Jackson reported that the Department is scheduled to distribute a customer satisfaction 138 survey to its user agencies by November 1, 2015 using SurveyMonkey<sup>®</sup>. The survey will

- 139 include questions regarding the use of National Integrated Ballistic Information Network
- 140 (NIBIN) association information and Toxicology and Controlled Substances reports.
- 141
- 142 <u>Facilities:</u>

Director Jackson provided a snapshot of the facilities projects at the Western and Central
Laboratories. Currently, the Western Laboratory expansion and renovation project is on budget,
but it is about two weeks behind schedule. The manufacturer of the casework (cabinetry) for the
new laboratory space is behind schedule causing the delay.

147

148 Also, the Department was awarded funds for the detailed planning phase of the 149 renovation/expansion of the Central Laboratory, which will allow the DFS operations currently 150 housed in Biotech 8 to move back into the expanded Central Laboratory. Contract negotiations 151 are still underway with an architectural and engineering firm for the project.

- 152
- 153 Grants:

154 Director Jackson updated the Committee on the Department's current grants: the NIJ Research 155 and Development of Publicly Funded Forensic Science Laboratories to Assess the Testing and 156 Processing of Physical Evidence; the 2016 Highway Safety Grant; the FY 2015 Paul Coverdell

- grant; the FY 2015 DNA Capacity Enhancement and Backlog Reduction Program grant; and the
- 157 grant, the FT 2015 DNA Capacity Enhancement and Backlog Reduction Program grant, and the
   158 New York County District Attorney's Office Sexual Assault Kit Backlog Elimination Program.
- 159

160 <u>Workload/Backlog:</u> Director Jackson presented the Department's statistics in quarterly format 161 using graphs reflecting cases received, cases completed, the caseload, and the average number of 162 days in the system for each Section. Director Jackson pointed out how the cases received by the 163 Controlled Substances Section have decreased since the implementation of the revised marijuana

- 164 submission policy.
- 165

The Firearms Section continues to see an increase in submissions due to the Bureau of Alcohol,
 Tobacco, Firearms, and Explosives (ATF) encouraging law enforcement agencies to submit all
 guns for entry into the NIBIN system.

169

170 Director Jackson reminded the Committee that there has been an increase in the turnaround time 171 for the Forensic Biology Section over the past year due to the new national requirements for

- increased statistics. Currently, there are six new Forensic Biology examiners in training.
- 173

174 Director Jackson noted that, although the Toxicology Section has slightly decreased case 175 turnaround times for the past several quarters, the delays are still impacting the Office of the 176 Chief Medical Examiner and Driving Under the Influence of Drugs (DUID) cases.

177

Director Jackson also reminded the Committee that the Trace Evidence Section lost three scientist positions through budget reductions last year that were subsequently restored during the General Assembly Session. The Department has filled one position, and the newly hired examiner is in fire debris analysis training. However, two of the positions are still in recruitment.

- 183
- 184 <u>Synthetic Drug Testing in Virginia:</u>

185 Director Jackson gave a presentation on the Department's testing of synthetic drugs in the186 Controlled Substances and Toxicology Sections.

187

188 Director Jackson presented data on the number of cases where the Department had identified 189 different cannabimimetics and research chemicals from January to August 2015. She also 190 showed the number of cannabimimetic agent and research chemical cases that were being 191 completed at each DFS laboratory.

192

Director Jackson also shared a joint report by DFS and the Department of Criminal Justice Services on Drug Cases Submitted to DFS in CY 2014. A total of 31,345 drug cases were received by DFS in CY 2014. The report is organized by Virginia State Police Division and shows a breakdown of the types and number of drugs in each area of the Commonwealth. Director Jackson noted that the cannabimimetic agent submissions were down in 2014 compared to previous years.

199

Director Jackson discussed analytical challenges relating to the testing of cannabimimetic agents and research chemicals. Samples are screened using the three new DART-TOF instruments purchased with Abbott settlement funds. All three have been verified and all examiners have completed their training on the instruments. She provided the Committee with a case example of the data gathered by a DART-TOF.

205

Director Jackson also advised the Committee of the purchase of a Purged Ultimate Union (PUU) which was installed in the Controlled Substances Agilent 7890/5975 GC/MSD. She explained that it allows for the removal and installation of the GC column without venting the MSD. It saves at least four hours of instrument equilibration time. The PUU is currently undergoing testing in the Central Laboratory.

211

At the conclusion of Director Jackson's report, there was a discussion of the Department's
Toxicology Section's ability to meet the needs of the Office of the Chief Medical Examiner
(OCME).

215

The Chair called for a recess at 10:00 a.m.

- 217
- The Chair reconvened the Committee at 10:10 a.m.
- 219

## 220 Program Area Updates

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222 Forensic Biology Program Update: Brad Jenkins, Biology Program Manager, provided the 223 Committee with a Forensic Biology update. The validation of the Powerplex Fusion Kit for case 224 work has begun in the Central Laboratory. The validation is anticipated to be complete by the 225 spring of 2016 and will be sent to the SAC DNA Subcommittee, which includes Dr. Cotton and 226 Mr. Sobieralski. Dr. Maha is anticipated to be appointed the Subcommittee. After the validation 227 is completed in the Central Laboratory, the regional laboratories will begin their validations. The 228 Department anticipates being ready to report on 24 areas of DNA by the fall of 2016. The 229 national deadline for laboratories to move to reporting 24 areas of DNA is early 2017.

230

- TrueAllele, a computer system used by DFS to calculate statistics for complicated mixture profiles, will also under go additional validation to include the 24 areas of DNA contained in the new Powerplex Fusion Kit. Currently, this system is in use with the Powerplex 16 kit, which tests 16 areas of DNA.
- 235

Mr. Jenkins updated the Committee on the Post-Conviction Testing Project. The Virginia State Crime Commission (VSCC) recommended that additional testing (using YSTRs or Mini STRs) be done on all cases from the project with "inconclusive" results. All 420+ inconclusive cases were reviewed, and less than 40 cases have been identified for additional testing. The Department was provided funds in the budget to outsource the additional testing to a private laboratory. The Department is currently in the procurement process to contract with a private laboratory to conduct this testing.

243

Mr. Jenkins informed the Committee that the Federal Bureau of Investigations (FBI) had published information about retesting old FBI DNA cases due to issues with their population frequency database. The Department was not affected by the issue with the FBI's database. DFS has and continues to use its own population frequency database. DFS user agencies have been informed that the FBI's report does not affect any DFS cases.

249

Finally, Mr. Jenkins advised that DFS is in the final process of going back through older cases that need supplemental statistics due to the SWGDAM Interpretation guidelines.

252

253 Calibration and Training Update: Melissa Kennedy, Calibration and Training Program Manager, 254 provided the Committee with an update on the Breath Alcohol and the Forensic Training 255 Sections. The Breath Alcohol Section distributed two online customer satisfaction surveys on April 7, 2015. The first survey, which was sent to the legal community, had ten questions 256 257 focusing on testimony and records (236 responses were received). The second survey, which 258 was sent to law enforcement agencies, had 12 questions focusing on training and instrument 259 support (1,470 responses were received). Ms. Kennedy provided an overview of the responses 260 and comments received from law enforcement and the legal community.

261

The Breath Alcohol Section continues to increase available public access to its records. Breath Alcohol records were first available on the Department's website in August 2015 in ".pdf" format. Grant funding received from the Virginia Highway Safety Office has been used to expand the project. Records online now include instrument records, redacted subject test records, operator license information, and statistical reports. Personally identifiable information has been redacted and an authentication disclaimer is posted on the site.

268

Ms. Kennedy went over staffing for the Breath Alcohol Section. The 2015 DMV grant will include funding for an additional Forensic Scientist. The additional scientist will increase eh Section's training and instrument maintenance capacity to allow for the exploration of alternative training methods. Ms. Kennedy also informed the Committee that 10 new law enforcement instructors were trained, and that 19 law enforcement instructors were recertified to teach breath alcohol operator courses.

275

276 Ms. Kennedy provided a brief update on the Forensic Training Section. The Forensic Training 277 Section updated portions of the Evidence Handling Guide and posted each section on the 278 Department's website by laboratory discipline for easier access on mobile devices. The Forensic 279 Training Section opened up the Laboratory Capabilities and Update retraining sessions to all law 280 enforcement in the spring of 2015. Previous retraining sessions were only open to Forensic 281 Science Academy alumni. Attendance increased 25% over 2014, and there was a 40% increase 282 in first time attendees. The Section also held its annual retraining seminar in September 2015, 283 and there were 172 attendees.

284

285 <u>Chemistry Program Update:</u> Scott Maye, Chemistry Program Manager, provided the Committee 286 with an update on the Department's Chemistry Program area. In the Toxicology Section, four 287 immunoassay tests are currently in development to be added to the DUID panel. Mr. Maye 288 anticipates the validation to happen by the end of 2015. A research grant has been awarded to 289 develop and validate two Toxicology methods which will begin January 1, 2016. DFS is 290 currently in the process of procuring a QTOF instrument for research purposes.

291

In the Controlled Substances Section, LC-DAD Cannabinoid method development and
validation has been completed. Instruments have been ordered for the Central Controlled
Substances Section and the Central Toxicology Section.

295

Mr. Maye gave a brief overview of the six compounds that DFS recommended the Board of
Pharmacy consider adding to Schedule I of the Code of Virginia. The Board of Pharmacy is in
the process of adding all six compounds to Schedule I through the expedited regulatory process.

299

Mr. Maye gave an overview of the Trace Evidence Section. DFS is currently screening candidates for the two vacant positions for explosives and primer residue. There is one examiner in training. Currently, the Trace Evidence Section has limited its explosives examinations to chemical reactions devices as there are only two examiners statewide who are able to conduct these examinations. The Department has been able to continue with primer residue examinations by recertifying an examiner who was previously certified in primer residue.

306

307 <u>Physical Evidence Program Update:</u> Sabrina Cillessen, Physical Evidence Program Manager,
 308 provided the Committee with an update on the Latent Prints Section. The Latent Prints Section
 309 is currently testing a new version of the Mideo software. The current version is still being used
 310 for case work. The Latent Prints Section is also evaluating new alternative light sources. Ms.
 311 Cillessen gave a brief overview of the Section's current staffing, including examiners in training.
 312

Ms. Cillessen updated the Committee on the Digital and Multimedia Evidence (DME) section. She reminded the Committee that the DME Section restored its video enhancement analysis capabilities. Two new systems were purchased for use in video analysis examinations, and DME examiners will receive training on both systems. DME is also evaluating the possibility of conducting Taser analysis. DME would not perform function testing, but would be able to retrieve image files from the Tasers.

319

- 320 Ms. Cillessen gave a brief update on the Firearms and Toolmark Section. The Section has been 321 conducting chamber mark research and utilized an intern to assist with the research. The
- 322 Firearms and Toolmark Section will also be hiring and training three new examiners.
- 323
- Ms. Cillessen informed the Committee that the Questioned Documents Section conducted a four hour seminar in Manassas on October 6, 2015 on its laboratory capabilities.
- 326

Finally, Ms. Cillessen shared with the Committee the Department policy change in reporting National Integrated Ballistic Identification Network (NIBIN) associations. Effective July 9, 2015, DFS discontinued the concurrent confirmation of NIBIN associations. DFS will now issue a Certificate of Analysis or letter regarding potential NIBIN associations. When confirmation is needed, all evidence relevant to the association will need to be resubmitted by the law enforcement agency. This policy change was implemented to improve efficiency for the Firearms Section.

334

All DFS policy notices are posted on the DFS website and sent to the Virginia Sheriffs'
Association, the Virginia Association of Chiefs of Police, the Commonwealth's Attorneys'
Services Council, the Indigent Defense Commission, the Virginia Association of Criminal
Defense Lawyers, and the Criminal Law Section of the Virginia State Bar. The Forensic Science
Academy alumni are also often used as a resource for distribution of these notices.

340

## 341 Other Business

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343 <u>Future Projects:</u>

344 Director Jackson reminded the Committee of work the Department is conducting for which
 345 Committee's input will be sought.

346

Forensic Biology is currently working on the validations for DNA casework using the Powerplex
Fusion Kit. The DNA subcommittee will be receiving information in 2016 from Mr. Jenkins for
feedback.

350

The Trace Evidence Section is currently reviewing the overall training manual and training program. Maureen Bottrell will review the manual and send any recommendations to Mr. Maye.

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354 <u>Annual Election of Committee Chair and Vice Chair:</u>

The Chair called for the annual election of the Committee Chair and Vice-Chair. The Chair asked for nominations for Chair of the Committee, and Dr. Poklis moved that Mr. Meyers be reelected as Chair. The nomination was seconded by Dr. Edinboro, and passed by unanimous vote of the Committee. The Chair asked for nominations for Vice-Chair. Ms. Given nominated Mr. Zercie to the Vice-Chair position. The nomination was seconded by Dr. Poklis, and passed by

- 360 unanimous vote of the Committee.
- 361
- Ms. Studer reminded the Committee that their Conflict of Interest Filings are due by December15, 2015.
- 364
- 365 **Public Comment**

366

- 367 None
- 368

# 369 <u>2016 Meeting Dates</u>370

The Scientific Advisory Committee will meet Tuesday, May 10, 2016, and Friday, October 14, 2016.

373

### 374 Adjournment

375

The Chair asked if there was a motion to adjourn. Ms. Given moved that the meeting of the SAC be adjourned; this was seconded by Director Jackson, and passed by unanimous vote.

378

The meeting adjourned at 11:44 a.m.