

1 **Minutes**
2 **Scientific Advisory Committee Meeting**
3 **April 11, 2023**
4 **Department of Forensic Science, Central Laboratory, Classrooms 1 and 2**
5

6 **Committee Members Present**

7 Randall E. Beaty, *Vice Chair*
8 Christopher Bommarito
9 Kathleen Corrado, Ph.D.
10 William E. Demuth, II
11 Erin P. Forry
12 Linda C. Jackson
13 Marc A. LeBeau, Ph.D.
14 George C. Maha, Ph.D.
15 Richard P. Meyers
16 Kristin Schelling, *Chair*
17 Peter M. Vallone, Ph.D.
18 Kenneth B. Zercie

19
20 **Committee Members Attending Virtually**

21 Patricia A. Manzolillo
22

23 **Staff Members Present**

24 David Barron, Ph.D., Deputy Director
25 Mason Byrd, Chief Deputy Director
26 Deea Chakraborty, Legal Assistant
27 Sabrina S. Cillessen, Physical Evidence Program Manager
28 Leslie Ellis, Human Resources Director
29 James W. Hutchings, Ph.D., Toxicology Program Manager
30 Bradford C. Jenkins, Forensic Biology Program Manager
31 Alka B. Lohmann, Director of Technical Services
32 Scott Maye, Central Laboratory Director
33 Jessica B. Norton, Sr. Legal Assistant
34 Kelly Shelton, Administrative Assistant
35 Elise Stroble, Grants and Administration Program Manager - Secretary
36 Rebecca Wagner, Ph.D., Chemistry Research Section Supervisor
37 Robyn Weimer, Chemistry Program Manager
38

39 **Call to Order**

40 Ms. Schelling, Chair of the Scientific Advisory Committee (“Committee” or “SAC”), called the
41 meeting to order at 10:01 a.m. Mason Byrd, Chief Deputy Director, stated for the record that a
42 majority of the Committee was physically present.
43

44 Mr. Byrd addressed Patricia Manzollillo's remote participation, stating that she was participating
45 remotely from Washington, D.C., because her residence is more than 60 miles from the meeting
46 location, pursuant to the Committee's Policy on Individual Electronic Participation and All-Virtual
47 Scientific Advisory Committee Meetings under Virginia Code § 2.2 3708.3.

48
49 Ms. Schelling reminded the Committee to speak clearly and ensured that Ms. Manzollillo could
50 hear her.

51
52 **Adoption of Agenda**
53 Ms. Schelling advised that the first order of business was the adoption of the draft agenda for the
54 meeting and noted that the agenda was previously shared with the Committee members via email.
55 Mr. Zercie made a motion to adopt the agenda, which was seconded by Mr. Meyers and passed by
56 unanimous vote of the Committee.

57
58 **Adoption of Minutes of the October 18, 2022 Committee Meeting**
59 Ms. Schelling noted that the draft minutes from the October 18, 2022 meeting were previously
60 shared with the Committee by Ms. Stroble and asked if there were any proposed changes. Being
61 none, Mr. Zercie made a motion that the minutes be approved, which was seconded by Dr. Vallone.
62 The minutes were approved by unanimous vote of the Committee.

63
64 **SAC Chair's Report**
65 Ms. Schelling stated that this would be her last meeting as Chair. She thanked the Committee,
66 emphasized the importance of the mission, and stated that she enjoyed being a part of it.

67
68 **DFS Director's Report**
69
70 Ms. Schelling called on Director Jackson to provide her report to the Committee.

71
72 **Central Laboratory Project**
73 Director Jackson provided updates on various areas of DFS operations, starting with the Central
74 Laboratory capital project. Director Jackson announced that the groundbreaking occurred on
75 March 2, 2023. She also informed the Committee that several guests provided remarks, including
76 Secretary of Public Safety and Homeland Security Robert Mosier, as well as Secretaries
77 McDermid and Littel. Final inspections are anticipated for late 2025 and move-in is expected to
78 be sometime in early 2026.

79
80 **Training for Attorneys and Judges**
81 Director Jackson reminded the Committee of the agency's plans to provide training sessions at all
82 four DFS laboratories for attorneys and judges to better understand the underlying science, how
83 the testing works, and to better understand DFS' reports and the implications behind the test
84 results. The first will be half-day sessions on Controlled Substances in May 2023. Full-day DNA
85 training sessions are planned for the fall of 2023 at all four laboratories.

86
87 **Customer Working Group**

88 Director Jackson updated the Committee on the Customer Working Group, which was established
89 prior to the pandemic, to seek customer service feedback. The first meeting will be held virtually
90 on May 8, 2023. Two items on the agenda for the upcoming meeting are potential changes in
91 Latent Prints Section reporting and DNA Section changes in reporting DNA allele tables in
92 Certificates of Analysis.

93 94 Staff Training

95 Director Jackson let the Committee know that DFS has put forward a new agency goal for staff
96 training and that the number of hours of required training for scientific staff was increased from
97 eight to sixteen hours per year. This new goal is in line with the recommendations of *E2917*
98 *Practice for Forensic Science Practitioner Training, Continuing Education, and Professional*
99 *Development Programs*. Other staff within the agency have training goals with varying numbers
100 of hours per year.

101
102 Director Jackson reminded the Committee that DFS is providing training for forensic scientists
103 that will offer tools for managing stress and vicarious trauma that are inherent in the type of work
104 they do. The training is being conducted by MindGen, LLC and consists of four 45-minute
105 sessions. Two of the four sessions have been completed and the remaining sessions are scheduled
106 to end in May 2023.

107
108 Director Jackson also informed the Committee that a three-hour *Supervisor Civility Training* was
109 provided to agency supervisors by Karen Michael, PLC. The training covered topics such as
110 harassment in the workplace and the various federal and state statutes relating to those topics.

111 112 Post-Conviction Project

113 Director Jackson advised the Committee that case files identified for review as part of the post-
114 conviction project will be returned to the State Records Center. The Certificates of Analysis and
115 case information have been entered into the historical case file database as part of the agency's
116 historical case file project. Evidence identified in the case files and dried sample extracts will be
117 returned to the submitting agencies to be maintained as they would any other evidence. The
118 transfers will be done in batches, and a notification will be sent to law enforcement agencies in
119 advance.

120
121 Director Jackson also made the Board aware of a podcast entitled *Admissible: Shreds of Evidence*
122 that was produced by VPM, the local public radio station, which focused on the work of Serologist
123 Mary Jane Burton during the period of 1973 to 1988. Director Jackson and Brad Jenkins, Biology
124 Program Manager, were interviewed by VPM in early 2022 during which the reporter alleged that
125 they were in possession of documentation showing that Ms. Burton changed serology results in
126 logbooks. After the interview, DFS requested in writing a copy of such documentation, but the
127 request was denied by VPM. Director Jackson noted that it seemed premature to discuss the
128 podcast in depth since only 10 out of 12 episodes have been released and DFS has not been given
129 the opportunity to review any documents possessed by VPM.

130 131 Case Statistics

132

133 Director Jackson shared the March workload statistics. She made note of the high average
134 turnaround time for Forensic Biology (DNA). There are four Forensic Biology positions in the
135 Governor's proposed budget and are maintained in the House and Senate budgets. Director
136 Jackson briefly discussed the Virginia budget process and mentioned that this budget cycle is only
137 for changes to the current budget.
138

139 Director Jackson shared quarterly case submission/completion comparisons beginning with the
140 final quarter of 2021 and ending with the first quarter of 2023. Controlled Substances submissions
141 rose significantly this past quarter, with 2800 cases submitted in March, 1000 of which were to the
142 Western Laboratory. Director Jackson stated that DFS has positions open in anticipation of an
143 increase in submissions post-pandemic.
144

145 In the Digital & Multimedia Evidence Section, case submissions increased in the last quarter and
146 two examiner positions were recently vacated. Those positions have been posted. In the Firearms
147 & Toolmarks Section, DFS continues to see a decrease turnaround time, due in part to the fact that
148 a number of law enforcement agencies have NIBIN capabilities. In Latent Prints & Impressions,
149 the Section is doing well. For Toxicology, the turnaround time has increased somewhat, but more
150 staff have completed training and the Section has been working to complete some of the older
151 cases that were in backlog. Some cases are still being outsourced by the OCME and are not
152 included in the statistics. Trace Evidence has been steady for the last few years.
153

154 Budget and Resources

155 Director Jackson shared information on the Department's FY23/FY24 Biennial budget,
156 highlighting the introduced non-technical budget changes for 2024. One of the items involves
157 converting a part-time Evidence Receiving Specialist position in the Western Laboratory to full-
158 time to improve efficiency. Funding was also sought for tools to be used in the Digital &
159 Multimedia Evidence Section, as cases continue to increase, and more tools are needed. In
160 addition, funding was sought for the PERK Tracking Coordinator position, as the federal SAKI
161 grant that covered the position will end in September of this year. Finally, Director Jackson
162 mentioned the four Forensic Biology positions that will help triage and screen sexual assault kits
163 as well as a new position to work on marijuana issues, including edibles.
164

165 Grants

166 Director Jackson gave an overview of the five grant applications that the Forensic Science Board
167 approved during their meeting the day before. These included:
168

- 169 • Two DMV Highway Safety grant projects, one for the Breath Alcohol Section and one for
170 Toxicology – DFS applied for these in February.
- 171 • DNA Capacity Enhancement and Backlog Reduction (CEBR) Program for the Forensic
172 Biology Section – DFS has several positions on this recurring grant, as well as equipment
173 and supplies.
- 174 • FY 2023 Paul Coverdell Forensic Science Improvement Grant – DFS will apply for
175 funding through the Department of Criminal Justice Services in May. Director Jackson
176 advised the Committee that DFS and the OCME typically split this funding evenly and that
177 DFS mainly uses these funds for continuing education of non-DNA staff, as the CEBR
178 grant allows for continuing education of DNA staff.

- 179
- National Institute of Justice Research and Evaluation for the Testing and Interpretation of Physical Evidence in Publicly Funded Laboratories – DFS will apply for funding in May for three research projects, two in Chemistry and one in Biology. Director Jackson briefly described each project and what they will entail.
- 180
181
182
183

184 Division of Technical Services (DTS) Updates

185

186 DTS Update

187 Ms. Schelling called on Alka Lohmann, Director of Technical Services, to provide an update on
188 the Division of Technical Services. Ms. Lohmann advised the Committee that DFS submitted its
189 surveillance conformance documentation on March 31, which was due on April 1, 2023. The
190 opening meeting for the remote surveillance document review is scheduled for May 2, 2023. Also,
191 internal audits were conducted February 21 through the end of March. Preliminary findings have
192 been issued and DFS is working to address those, though there were no major issues. She reminded
193 the Committee that our current accreditation cycle expires on September 30, 2026. Next year,
194 there will be another on-site surveillance review.

195

196 Forensic Training

197 Ms. Lohmann noted that the 108th Session of the Forensic Training Academy graduated on March
198 31st. This nine-week training provides instruction on the proper collection, preservation, and
199 submission of evidence, as well as the capabilities of the laboratory. The two newly hired Forensic
200 Trainers were able to assist with the training, as their employment began prior to the start of the
201 session.

202

203 Ms. Lohmann provided an update on two chemistry research grants:

204

- Paradigm Shift in Forensic Toxicology Screening: The Development and Validation of Two Automated Sample Preparation Techniques for the Comprehensive Screening of Biological Matrices Using High Resolution Mass Spectrometry
 - This grant project ended on December 31, 2022. DFS has submitted the final reports and this project is complete. She stated that DFS learned a lot through the process, although the research did not produce the results that were expected.
 - Expanded Quantitative Cannabinoid Testing in Biological Specimens to Combat the Ever-Changing Cannabis Landscape
 - This grant also had an end date of December 31, but DFS received a one-year extension to allow time for completion of the method validation.
- 215

216 Chemistry Research Staffing

217 Ms. Lohmann discussed the various positions, grant-funded and non-grant funded, that are in
218 different stages of training and/or recruitment. She provided an update on the CDC Opioid Project
219 that is now called *Overdose Data to Action in States* and mentioned that DFS anticipates funding
220 to continue for several years to allow for further method development and validation.

221

222 Ms. Lohmann also reminded the Committee that DFS has several representatives on OSAC and
223 shared a list of individuals who are currently active in her presentation. DFS has several members
224 on various task groups who continue to monitor all standards and recommendations and provide
225 comment as applicable.

226

227 Chemistry Program Update

228 Chemistry Program Manager Robyn Weimer provided an update on several trainees in both the
229 Trace Evidence and the Controlled Substances sections. She discussed the statewide Section
230 training for Trace Evidence that occurred in Richmond in March 2023 and shared information on
231 the topics that were covered. Ms. Weimer also discussed the grant that was just awarded for
232 research in the Trace Evidence section. She advised that this research is a continuation of a prior
233 award in 2018 that dealt with objective measures for gasoline identification in fire debris evidence
234 cases. This new award will expand the method for the identification of medium petroleum
235 products. Ms. Weimer discussed outcomes of the previous research project and the implementation
236 of the gasoline workflow.

237

238 Ms. Weimer shared information on a recent online training symposium that was provided to the
239 Controlled Substances Section as well as a statewide Section training planned for October 2023
240 that will include a tour of a hemp processor facility.

241

242 Ms. Weimer also discussed several compounds that DFS recommended to the Board of Pharmacy
243 in 2022 for expedited scheduling, five of which became scheduled on February 1, 2023, and
244 another five that will be scheduled effective April 12, 2023. In addition, there are another five
245 compounds that DFS recommended in January 2023 that were considered at the Board of
246 Pharmacy's meeting on March 30, and are pending final approval.

247

248 Also discussed were legislative actions that dealt with 1) definitions of "tetrahydrocannabinol,"
249 "industrial hemp," and "industrial hemp extract"; 2) field test regulations for the approval of field
250 tests for the detection of drugs; and 3) the first approved presumptive mobile instrument for the
251 detection of drugs.

252

253 Forensic Biology Program Update

254 Brad Jenkins, Forensic Biology Program Manager, presented an update on the Forensic Biology
255 Program Area, including staffing. He discussed several positions that are in recruit or in training.
256 He mentioned that some of the open positions were filled internally, and the Section is working to
257 backfill those vacated positions. Mr. Jenkins discussed the training projects that are underway
258 and/or completed, including STRmix, True Allele, and Y-STR. He provided an update on the
259 validation of the following: STRmix and True Allele, new real time PCR instruments, a new DNA
260 quantitation kit, new thermal cyclers, and a new Y-STR kit.

261

262 Mr. Jenkins discussed the outsourcing of approximately 600 pre-CODIS (prior to 1997) and
263 terminated (1997-2016) kits for testing under the SAKI (Sexual Assault Kits Initiative) grant
264 program, as well as legislation dealing with strangulation kits. The legislation creates standalone
265 “trace evidence collection kits,” colloquially referred to as “strangulation kits,” to be collected
266 similarly to sexual assault kits, but will be used for strangulation in non-sexual assault cases and
267 has a delayed implementation of July 1, 2025. DFS will be working with a vendor to create these
268 kits, though some types of kits are already on the market. Mr. Jenkins stated that one position was
269 included in the legislation that will be filled prior to the effective date of July 1, 2025.

270
271 Mr. Jenkins also discussed the possible change in publishing DNA allele tables in Certificates of
272 Analysis. The charts were meaningful at one time but are no longer meaningful as the analyses
273 have become more complicated. There is a concern that this information could be used to create
274 independent databases, and there was some discussion around that topic specifically related to
275 rapid DNA instruments. Mr. Jenkins also briefly discussed the recent research project that deals
276 with robotics, particularly in sexual assault cases. Ms. Schelling asked whether the updated
277 robotics method for DNAase would be developed in-house or outsourced, and Mr. Jenkins stated
278 that this would be an in-house method development, funded by an NIJ research grant. There was
279 some further discussion regarding this method development and removing the allele tables from
280 reports.

281
282 Physical Evidence Program Update
283 Sabrina Cillessen, Physical Evidence Program Manager, updated the Committee on the staffing
284 for the Latent Prints & Impressions, the Firearms & Toolmarks and the Digital & Multimedia
285 Evidence (DME) Sections. The Digital & Multimedia Section has recently lost two qualified
286 examiners and those positions are now in recruitment. She also talked about the Firearms &
287 Toolmarks examiner training, which is a two-year program. The Section has had difficulty in
288 recruiting and training examiners.

289
290 For training, Ms. Cillessen advised the Committee that the Latent Prints & Impressions staff will
291 be attending the upcoming IAI meeting in Maryland as part of their state-wide Section training
292 and that the Firearms & Toolmarks Section will attend a three-day statewide training in Manassas,
293 Virginia that will include training by the ATF on various machine guns, an Armorer course, and a
294 Glock-specific training workshop.

295
296 Ms. Cillessen also discussed the AFIS upgrade that is underway by the Virginia State Police. DFS
297 will be required to purchase new workstations for this purpose. The upgrade is due to “go-live” in
298 June. Several law enforcement agencies have opted out of the upgrade, due to the cost associated
299 with the equipment and maintenance. Ms. Cillessen reminded the Committee of the NIBIN
300 capabilities that many law enforcement agencies now have and how that has impacted case
301 submissions and turnaround times in the Firearms & Toolmarks Section. She also discussed the
302 Virginia Cybercrime Initiative Conference, headed by the Commonwealth’s Attorneys’ Services
303 Council at which Jesse Lindmar, DME Section Supervisor, discussed the Cellebrite software
304 capabilities. Also, regarding the DME Section, Ms. Cillessen discussed the Section’s increase in
305 requests for vehicle forensic examinations involving vehicle computer chips. She stated that these
306 are very time-consuming analyses.

307

308 Toxicology Program Update

309 James Hutchings, Ph.D., Toxicology Program Manager, updated the Committee on the Toxicology
310 and Breath Alcohol Sections. He began with an update on the following method
311 development/validation projects: nitazenes, cannabinoid quantitation and confirmation, and
312 alternative blood sources.

313

314 Dr. Hutchings provided a staffing update for the Toxicology and Breath Alcohol Sections, noting
315 various vacancies that are in recruit, as well as personnel in training. Dr. Hutchings updated the
316 Committee on the two (2) grant applications that were submitted recently to the DMV Highway
317 Safety Office.

318

319 Dr. Hutchings presented Toxicology statistics for 2021 and 2022, and mentioned that the OCME
320 cases are artificially low, as some cases from Eastern and Western are being outsourced for testing.

321

322 Dr. Hutchings discussed the change in the DUI/DUID testing policy that went into effect on
323 January 1, 2023. Previously, absent a customer request, cases with a blood alcohol content (BAC)
324 of greater than or equal to 0.100% were not screened for drugs. Under the new policy, such cases
325 are additionally screened for cannabinoid metabolites. Screening for additional drugs is currently
326 performed on all samples with a BAC of less than 0.100%

327

328 Dr. Hutchings presented the Breath Alcohol statistics and noted that evidential breath tests are still
329 trending down from pre-pandemic levels. He also informed the Committee that the Section is still
330 in the process of developing an Invitation for Bids for new breath test instruments. These new
331 instruments are anticipated to provide high speed communication and allow for the use of laser
332 printers.

333

334 Finally, Dr. Hutchings discussed legislation impacting the Toxicology Section, including a
335 pending budget item that would require screening of deidentified cases for a full drug panel if only
336 blood alcohol and cannabis was screened, and SB 1398 that will require data sharing with the
337 DMV regarding impaired driving.

338

339 The Committee took a short break beginning at 11:23 a.m. and resumed at 11:33 a.m.

340

341 **New Business**

342

343 Controlled Substances Validation Summary Update

344 Robyn Weimer, Chemistry Program Manager, provided a brief presentation discussing the
345 validation summary for the addition of THC isomers to an existing method. Ms. Weimer advised
346 that the summary had been provided to the Controlled Substances Subcommittee prior to the
347 meeting and they had no recommendations or questions for discussion. She added that another
348 validation will be forthcoming for additional isomers. Mr. Bommarito commented that he was
349 very impressed with the scope of the validation.

350

351 Formation of a Trace Evidence Subcommittee

352 Ms. Schelling called on Director Jackson to discuss the need for the creation of a Trace Evidence
353 Subcommittee. Director Jackson referenced the new Fire Debris methodology described by
354 Chemistry Program Manager Weimer. Although the new procedures are based on published, peer-
355 reviewed research, it is new to DFS, and it would be helpful to have feedback.

356
357 Ms. Schelling appointed Mr. Bommarito, who fills the role of Trace Evidence Scientist, as Chair
358 of the new Trace Evidence Subcommittee, as he had offered to serve. She also appointed Erin
359 Forry (QA), Randall Beaty, and Ken Zercie to complete the subcommittee. Ms. Schelling stated
360 that the scope would be reviewing validations, answering questions, and providing technical
361 guidance as needed.

362 Election of Chair and Vice Chair

363 Ms. Schelling stated that she is no longer eligible to serve, as she has served two terms as Chair.
364 She stated that Mr. Beaty is not eligible for Vice Chair, as he has served two terms in that capacity
365 as well. Ms. Schelling stated that she would like to nominate Dr. Corrado for the position and
366 asked if she would be willing to serve. Dr. Corrado confirmed that she would. There were no
367 other nominations for the position of Chair. Ms. Schelling asked for a motion to appoint Dr.
368 Corrado the position of Chair for the Scientific Advisory Committee, starting July 1, 2023. A
369 motion was made by Mr. Zercie and seconded by Dr. Vallone. The motion passed by unanimous
370 vote, with Dr. Corrado abstaining.

371
372
373 Ms. Schelling asked for nominations for the position of Vice Chair. Director Jackson stated that
374 she would like to nominate Ms. Forry, but it was noted by Mr. Byrd that Ms. Forry's term will end
375 on June 30, 2023 and reappointments have not yet been made. Ms. Schelling then asked for
376 nominations of members whose terms will not expire on June 30, 2023. Dr. Corrado nominated
377 Dr. Vallone, who stated that he would be willing to serve. Ms. Schelling asked for a motion to
378 elect Dr. Vallone to the position of Vice Chair beginning July 1, 2023. Mr. Beaty made a motion
379 that was seconded by Ms. Forry. The motion passed by unanimous vote, with Dr. Vallone
380 abstaining.

381 Public Comment

382 There was no public comment.

383 Confirm Future Meeting Date

384
385 Ms. Schelling confirmed the next meeting date, scheduled for October 11, 2023, which will be an
386 all-virtual meeting. Mr. Byrd reminded the Committee that, pursuant to policy, the meeting in
387 April the following year would have to be in person. There were no questions or concerns
388 regarding this.

389 Adjournment

390
391 Ms. Schelling asked for a motion to adjourn. Dr. Corrado made a motion to adjourn the meeting
392 of the Scientific Advisory Committee, which was seconded by Dr. Vallone and passed by
393 unanimous vote.

394
395
396 The meeting adjourned at 11:53 a.m.