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Final - Minutes
Scientific Advisory Committee Meeting
October 14, 2016
Department of Forensic Science, Central Laboratory, Classroom 1

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Committee Members Present

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Leslie E. Edinboro, Ph.D., Chair
Maureen C. Bottrell
Robin W. Cotton, Ph.D.
Jo Ann Given (participated remotely pursuant to Code § 2.2-3708.1)
Linda C. Jackson
Richard P. Meyers
Carl A. Sobieralski (participated remotely pursuant to Code § 2.2-3708.1)
Travis Y. Spinder
Jami J. St. Clair
Kenneth B. Zercie

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Committee Members Absent

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Randall E. Beaty
George Maha, Ph.D.

Staff Members Present

Wanda W. Adkins, Office Manager
Jeffrey D. Ban, Central Laboratory Director
Sabrina Cillessen, Physical Evidence Program Manager
Amy M. Curtis, Department Counsel
Katya N. Herndon, Chief Deputy Director
Bradford C. Jenkins, Biology Program Manager
James Hutchings, Ph.D., Toxicology Program Manager
Alka B. Lohmann, Technical Services Director
M. Scott Maye, Chemistry Program Manager
Carisa M. Studer, Legal Assistant

Call to Order

Leslie Edinboro, Ph.D., the Chair of the Scientific Advisory Committee (“Committee” or “SAC”), called the meeting of the Committee to order at 9:05 a.m. Dr. Edinboro informed the Committee that Jo Ann Given and Carl Sobieralski would be participating remotely pursuant to the SAC’s Policy on Individual Participation in Scientific Advisory Committee Meetings by Electronic Means, which was adopted in accordance with Virginia Code § 2.2-3708.1. Ms. Given participated by telephone from Virginia Beach, Virginia, because of medical reasons. Mr. Sobieralski participated by telephone from Indianapolis, Indiana, due to an ongoing assessment at his laboratory.

47 **Adoption of Agenda**

48
49 Dr. Edinboro asked if there were any additions or changes to the draft agenda for the meeting.
50 Being none, Mr. Zercie made a motion to adopt the agenda, which was seconded by Ms. St.
51 Clair, and adopted by unanimous vote of the Committee.

52
53 **Adoption of Minutes**

54
55 The Chair asked if there were any changes or corrections to the draft minutes from the May 10,
56 2016 meeting. Being none, Director Jackson made a motion to adopt the minutes from the May
57 10, 2016 meeting, which was seconded by Mr. Zercie, and adopted by unanimous vote of the
58 Committee.

59
60 **Chair's Report**

61
62 Dr. Edinboro welcomed the Committee members and thanked them for their attendance.

63
64 Dr. Edinboro spoke about the recent passing of Dr. Alphonse Poklis, who had been a member of
65 the Scientific Advisory Committee since its inception in 2005. Dr. Edinboro spoke about Dr.
66 Poklis' body of work in toxicology and his many professional accomplishments. The Committee
67 observed a moment of silence in honor of Dr. Poklis.

68
69 Dr. Edinboro did not have a report for the Committee for this meeting.

70
71 **DFS Director's Report**

72
73 **Facilities:**

74 Director Jackson reported to the Committee that the formal ribbon cutting ceremony to celebrate
75 the expansion and renovation of the Western Laboratory was held on September 26, 2016.
76 Secretary of Public Safety and Homeland Security Brian Moran, Secretary of Administration
77 Nancy Rodrigues, and Secretary of Health and Human Resources William A. Hazel, Jr., all
78 participated in the ceremony. Tours were given of both the DFS and Office of the Chief Medical
79 Examiner (OCME) facilities.

80
81 Director Jackson also updated the Committee on the status of the facilities project for the Central
82 Laboratory. SFCS, the same firm that was awarded the contract for the Western Laboratory
83 project, was selected as the Architecture and Engineering firm for the Central Laboratory
84 expansion project. The Department of General Services conducted a parking study for the
85 Central Laboratory project, which included a geotechnical survey of the current parking surface
86 to determine the feasibility of digging underground at that location. The selection of a
87 Construction Manager at Risk is still underway.

88
89 **Agency Events:**

90 Director Jackson informed the Committee that the comprehensive physical evidence recovery kit
91 (PERK) legislation (Virginia Code § 19.2-11.5 through 19.2-11.11) went into effect on July 1,
92 2016. The legislation establishes a comprehensive procedure for the consistent collection,

93 handling, storage, and analysis of PERKs. Information about the requirements of the legislation
94 was provided to DFS customers, and a notice was posted to the Department’s website. To date,
95 DFS has seen a 42% increase in PERK submissions, but Director Jackson anticipates having a
96 better estimate on the long term impact to PERK submissions by the next Committee meeting.

97
98 Director Jackson reported to the Committee that DFS released a joint report with the Department
99 of Criminal Justice Services (DCJS) on September 20, 2016, entitled “Drug Cases Submitted to
100 the Virginia Department of Forensic Science CY 2015.” DCJS used data provided by DFS to
101 show drug trends in various areas of the Commonwealth broken down by Virginia State Police
102 Divisions. The report, which is posted on the DFS website, is an update to a report first released
103 in 2013.

104
105 Director Jackson informed the Committee that the Department purchased Qualtrax, which is a
106 quality and compliance management software that will maintain accreditation, certification and
107 training documentation and streamline the workflow of business processes. Administrative
108 training on the system for DFS staff was held in September 2016. The Department hopes to go
109 live with Qualtrax in January 2017.

110
111 Director Jackson announced to the Committee that the Department is beginning to plan for the
112 implementation of upgrades to the Laboratory Information Management System (LIMS), which
113 will include pre-log and electronic Certificate of Analysis dissemination. It will allow users all
114 over the state to access the system utilizing a secure portal. DFS will use AuthXAccess software
115 for username and password management. The Department has received training materials for
116 users from North Carolina who have implemented the same system. DFS will start with a pilot
117 program for selected agencies. The Office of the Chief Medical Examiner (OCME) has already
118 agreed to be a pilot agency.

119
120 Director Jackson updated the Committee on the historical case file project. DFS now has five
121 wage employees scanning Certificates of Analysis from its archived case files (1973-1994) that
122 are not in LIMS and entering data about each case into a database. To date, information from
123 approximately 28,000 (out of approximately 1,000,000) case files has been uploaded to the new
124 database. The Department has been able to use the information uploaded to the new database to
125 identify cases for the serology and microscopic hair comparison case reviews.

126
127 Budget Overview:

128 Director Jackson presented the Governor’s FY17 budget reduction savings plan announced on
129 October 13 to the Committee. DFS had pledged \$100,000 of its FY16 Year End General Fund
130 balance to offset potential reductions in FY17. Director Jackson explained that the Chief of Staff
131 had requested agency heads to submit potential savings strategies to equal 5% of their budget for
132 consideration for FY17, which equates to approximately \$2 million for the Department’s budget.
133 The budget reduction plan announced on October 13 included a budget reduction of \$1.1 million
134 for the Department. Director Jackson went over the Department’s FY17 reductions, the most
135 significant of which is the elimination of the Questioned Documents Section. The additional
136 funding that was allocated to the Department for forensic biology and firearms during the 2016
137 General Assembly Session was held harmless from the FY17 reductions.

139 Agency heads will be advised in the near future of targets for the FY18 reductions. The
140 Department will subsequently prepare and submit its FY18 budget reduction strategies. The
141 Governor's Office will announce the FY18 reductions when the budget is released in December.
142

143 Grants:

144 Director Jackson presented an overview of DFS grants to the Committee. She noted that the
145 FY16 DNA Capacity Enhancement and Backlog Reduction grant funding was higher this year.
146 The FY16 Paul Coverdell grant will be used for continuing education in the Chemistry, Physical
147 Evidence and Toxicology program areas. The FY16 New York County District Attorney's
148 (DANY) Sexual Assault Kit Backlog Elimination Program grant is being used to fund the testing
149 of previously untested sexual assault kits.

150
151 The Department was awarded an NIJ grant to increase laboratory participation in research. DFS
152 will develop and validate instrumentation for toxicology analyses. The Department was also
153 awarded a grant for research and evaluation for the testing and interpretation of physical
154 evidence in publicly funded laboratories. The Latent Prints Section will participate in evaluation
155 of the Latent Sleuth technology.

156
157 Another new grant for the Department is the FY17 Highway Safety Project Grant (DMV)
158 TREDIS (Traffic Records Electronic Data System) program. DFS and the OCME are recipients
159 of this grant. It will be used to decrease the turnaround time of data from the OCME to DMV in
160 cases involving motor vehicle fatalities. DFS will receive funds to hire four part-time laboratory
161 specialists to assist in the Toxicology Section. Additionally, funds will be used to contract with
162 the Department's LIMS vendor to create a mechanism to electronically distribute information
163 from DFS to the OCME.

164
165 The FY16 Byrne Justice Assistance Grant will be used to increase the capacity of the Forensic
166 Training Section.

167
168 Finally, Director Jackson explained the National Sexual Assault Kit Initiative (SAKI) grant. The
169 SAKI grant will be used to fund the testing of any untested kits collected from July 1, 2014 to
170 June 30, 2016. DFS will also use SAKI funds to purchase or develop a PERK tracking system.

171
172 Workload/Backlog:

173 Director Jackson provided the Committee with an update on statistical trends in each of the
174 program areas. The report shows statewide statistics for each laboratory section. She explained
175 the new definition of the term "received" for these reports. The term "received" is the total
176 number of cases received or created by the section in the quarter.

177
178 Director Jackson reported that the Controlled Substances Section continues to see an increase in
179 submissions. The VSP has a new drug task force team focused in and around Amherst County
180 that has been fairly active. Additional localities are also participating in other VSP partnership
181 drug task forces that may explain the increase in drug submissions.

182
183 The Firearms Section is also continuing to see an increase in cases being submitted for NIBIN
184 entry. DFS was given funding for additional staff in the Firearms Section, and it has created a

185 new Forensic Scientist NIBIN position. The training period for these positions is only six
186 months whereas it takes 24 months to train a regular Forensic Scientist in the Firearms Section.
187 DFS also received funding to purchase NIBIN equipment for its Northern and Western
188 Laboratories so now DFS has statewide NIBIN capability.

189
190 The case turnaround times in the Forensic Biology Section continues to be higher than desired
191 due to additional statistical reports required for each reported profile and an increase in PERK
192 submissions. DFS anticipated that PERK submissions would double based on the new
193 legislation, but since July 1, they have only increased approximately 40%. DFS will continue to
194 monitor PERK submissions. The Department received funding for six additional forensic
195 scientists to analyze PERKs.

196
197 Director Jackson informed the Board that there are three trainees in the Latent Prints Section that
198 should be fully trained in the near future, which will improve turnaround times for latent prints.

199
200 Director Jackson reminded the Board that the Questioned Documents Section is being
201 eliminated. The Section receives approximately 20 to 30 cases per month. Notices advising DFS
202 customers that DFS will no longer be accepting evidence for questioned document examinations
203 will be sent out today.

204
205 Director Jackson updated the Committee on the progress of recruiting and training the six new
206 positions DFS received in the Toxicology Section. She also noted that DFS is in the process of
207 recruiting the four wage employees to assist the Toxicology Section that are funded by the
208 TREDs grant.

209
210 In the Trace Evidence Section, the training of the newly hired primer residue and explosives
211 examiners is almost complete. DFS restored explosives examination services in June 2016 and
212 has re-hired a retired examiner to perform technical reviews of cases until the Explosives Trainee
213 has completed the training.

214
215 Director Jackson advised the Committee that she informed the Forensic Science Board of the
216 recent report from the President's Council of Advisors on Science and Technology (PCAST).
217 She noted that she provided a brief overview of PCAST and shared the link to the report, as well
218 as links to responses to the report, with the Board members.

219
220 **Program Area Updates**

221
222 Forensic Biology Program Update:
223 Brad Jenkins, Biology Program Manager, provided the Committee with an update on the
224 Department's Forensic Biology Program Area. Mr. Jenkins reminded the Committee that the
225 Department has implemented the new fusion chemistry in the DNA Data Bank. The validation
226 of the Powerplex Fusion Kit for case work is underway and will go online in 2017. Instruments
227 were delivered in September to the Central and Eastern Laboratories. The validation will be sent
228 to the SAC DNA Subcommittee, which includes Dr. Cotton, Dr. Maha and Mr. Sobieralski.

229

230 Mr. Jenkins informed the Committee that the Serology Case Review began in May 2016. DFS
231 has pulled 100 serology cases from both the Northern and Eastern Laboratories, which are
232 currently being reviewed by two DFS forensic biology examiners with serology experience.
233 Jami St. Clair has volunteered to assist as the independent external reviewer. She will be
234 reviewing a subset of 20% of files reviewed. Ms. St. Clair began her review on October 13. Mr.
235 Jenkins will present a findings report to the Committee at a future meeting.

236
237 Mr. Jenkins advised the Committee that he has been able to utilize grants to support the
238 Department's transition to the new fusion chemistry. This has included the purchase of new
239 instruments for casework and software. Grant funding will also be used for a research staff
240 position that will assist in method development and validation for screening PERK cases for
241 male DNA. A new liquid handling instrument for the Data Bank will be purchased which should
242 increase efficiencies in that section. Grant funds are being used for outsourcing certain PERK
243 cases to the private laboratory; once analyzed, those cases are returned to DFS for review and
244 issuance of a final report and uploading into CODIS, if eligible.

245
246 Mr. Jenkins reported to the Committee on the revisions DFS made to its recommended collection
247 time periods for PERK samples. DFS issued a policy notice advising user agencies of this
248 change on September 16, 2016. The notice includes a chart that specified types of assault, and
249 the maximum collection time for each type. Mr. Jenkins noted that the most significant changes
250 include allowing vaginal samples for rape allegations to be collected for up to 120 hours and for
251 saliva samples on skin to be collected for up to 96 hours. DFS anticipates it may see an increase
252 in PERK submissions, but not a significant increase, as a result of the expansion of the collection
253 times.

254
255 Mr. Jenkins concluded by thanking Ms. St. Clair for taking the time to review cases for the
256 serology case review project.

257
258 Chemistry Program Update:

259 Scott Maye, Chemistry Program Manager, provided the Committee with an update on the
260 Department's Chemistry Program Area. The validation project involving elemental analysis
261 using laser induced breakdown spectroscopy (LIBS) in the Trace Evidence Section is nearing
262 completion. Mr. Maye reminded the Committee that the validation of LIBS will allow for the
263 analysis of lithium in clandestine methamphetamine laboratory samples. The Trace
264 Subcommittee met in May and provided suggestions to the Department. The suggestions were
265 adopted, a screening method was created, and standard operating procedures are being drafted.
266 Mr. Maye went over the process of developing a lithium screening method using Ion
267 Chromatography (IC). A quality assurance procedure for the LIBS has been developed and a
268 QA report will be generated with each use and become part of the case file. Additional method
269 development will be performed involving clandestine laboratory reaction mixtures to support
270 identification of other elements in the future.

271
272 Mr. Maye reported to the Committee about staffing levels in the Controlled Substances Section.
273 In the Northern Laboratory, there are two trainees who are expected to have their training
274 completed in November 2016 and January 2017, and one new examiner completed training in

275 August 2016. The Western Laboratory has one recently-hired trainee, and two examiners that
276 completed training in July 2016. The Central Laboratory also has one recently-hired trainee.

277
278 The Central Laboratory has two Trace Evidence Section trainees, one in explosives and one in
279 primer residue. Both are expected to complete training in December 2016. Once their training is
280 complete, DFS will assess what additional training they will receive in other trace evidence sub-
281 disciplines.

282
283 There was discussion of the Trace Evidence Subcommittee setting a meeting date in the future,
284 possibly before the next Committee meeting.

285
286 Physical Evidence Program Update:
287 Sabrina Cillessen, Physical Evidence Program Manager, provided the Committee with an update
288 on the Physical Evidence Program Area. Ms. Cillessen updated the Committee on the increased
289 submissions of firearms for function testing in the National Integrated Ballistic Identification
290 Network (NIBIN) database. She gave an overview of the new NIBIN positions. Since the
291 positions will not be doing comparison work, the training period will be reduced from 24 to six
292 months. The NIBIN examiners will issue Certificates of Analysis reporting NIBIN correlation
293 results, but if a subsequent comparison analysis is required, it will be transferred to a regular
294 firearms examiner for the additional analysis. Once all of the NIBIN examiners have completed
295 training, she anticipates improvement in turnaround time and number of cases completed.

296
297 Ms. Cillessen gave a brief update on the Latent Prints Section. Examiners in this section are
298 participating in a research project funded by the NIJ grant. The project is to evaluate Sciometrics
299 Latent Sleuth software. DFS will be able to purchase the software and hire one wage position.
300 There are two phases to the project, which has a goal of determining whether Latent Sleuth saves
301 search time and reduces examiner fatigue in complex cases. The Latent Prints Section currently
302 has two trainees in the Central laboratory and one in the Eastern laboratory whose training is
303 expected to be complete in December 2016.

304
305 Ms. Cillessen reported that one new impressions examiner was recently qualified, so now DFS
306 has three examiners in impressions. Two examiners participated in a West Virginia University
307 research project that aims to better understand how experts examine and interpret footwear
308 impressions.

309
310 Ms. Cillessen spoke briefly about the Questioned Documents Section. There are two examiners
311 and one position that had been in recruitment for approximately one year. DFS will discontinue
312 this service by January 2017.

313
314 Ms. Cillessen informed the Committee that the Digital and Multimedia Evidence (DME) Section
315 has continued to host training courses in the Northern Laboratory, which allows for DFS to
316 receive complementary registrations at these training. One new examiner will be fully qualified
317 in November 2016.

318
319
320

321 Toxicology Update:

322 Dr. James Hutchings, Toxicology Program Manager, provided the Committee with an update on
323 the Toxicology Program Area. He presented the new report format for toxicology cases. The
324 new format will reduce the time required for typing and reviewing Certificates of Analysis. Dr.
325 Hutchings reminded the Committee of the new DUID testing scheme that he presented at the last
326 Committee meeting. The new testing scheme and report format have been beneficial for OCME
327 cases.

328
329 Dr. Hutchings informed the Committee that DFS has been monitoring to determine the impact of
330 the Birchfield v. North Dakota decision on the Toxicology Section. To date, the only identified
331 impact has been an increase in search warrant submissions compared to implied consent
332 submissions.

333
334 Dr. Hutchings reminded the Committee that the Breath Alcohol Section continues to increase
335 available public access to its records. The expansion of website capabilities includes test results
336 by instrument site and test results by gender. The Breath Alcohol Section is in compliance with
337 new ASCLD supplemental requirements. Dr. Hutchings will be giving a demonstration of the
338 Intox EC/IR II instrument at the upcoming Virginia Indigent Defense Commission conference.

339
340 Dr. Hutchings updated the Committee on staffing for the Toxicology Section. There have been
341 twelve positions filled in the past year. Currently, there are two forensic scientists in
342 Toxicology, two forensic scientists in Breath Alcohol, one toxicology laboratory specialist, and
343 one toxicologist in training. DFS was budgeted funds for six new positions in Toxicology that
344 are currently in the hiring process.

345
346 **Other Business**

347
348 Microscopic Hair Comparison Case Review:

349 Amy Curtis, Department Counsel, updated the Committee on the progress of the Microscopic
350 Hair Comparison Case Review project. The Board had established a Subcommittee to develop
351 and recommend a review process for DFS hair comparison cases. Ms. Curtis summarized the
352 Subcommittee's work on the review process. A review team of two attorneys and one DFS
353 examiner with serology experience will review transcripts and recommend to the Subcommittee
354 whether notification should be made to the parties. Ms. Curtis reviewed the three questions that
355 the Review Team will use to evaluate the transcripts. The Subcommittee recommended to the
356 Board that the Review Team consider context during the transcript review, and the Board
357 approved adding the consideration of context language to the transcript review guidance
358 document. The Review Team will hold its first meeting to review transcripts on October 27,
359 2016. Linda Czyzyk from the Staunton Public Defender's Office and Earl Wheeler from the
360 Newport News Public Defender's Office will serve as the two attorneys on the review team, and
361 Bob Scanlon will be the DFS scientist. Ms. Curtis will be speaking at the IDC conference next
362 week and will meet with Ms. Czyzyk and Mr. Wheeler to provide them with background
363 materials and the transcripts for review in advance of the meeting.

364
365 The Department has been able to utilize the work of the historical case file project staff to
366 identify cases with microscopic hair examinations. Of the approximately 28,000 cases reviewed

367 thus far and entered into the database, 651 of the cases involved microscopic hair examinations.
368 One of the wage employees has been trained to help review and screen the cases involving hair
369 examinations into three categories: no comparison, comparison (not probative), and positive
370 (probative) association. Quality assurance reviews of the screened cases are being conducted.
371 Of the 651 cases involving microscopic hair examinations, 98 cases were identified as having
372 positive, probative associations. Those 98 cases are ready for the next step in the process.

373
374 The next step will be to confirm conviction information for the 98 cases and to locate transcripts
375 or transcript substitutes, where appropriate. DFS does not have the staff or resources for this.
376 DFS reached out to Mary Tate, who runs the Actual Innocence Clinic at the University of
377 Richmond, T.C. Williams School of Law, to request assistance in identifying students who may
378 be interested in working on the project. Ms. Tate offered the assistance of her students from the
379 Actual Innocence Clinic that starts in January 2017. Ms. Curtis and Ms. Herndon plan to meet
380 with Ms. Tate to provide her with background materials and have a more detailed discussion
381 about how Ms. Tate's Clinic students may be of assistance. Ms. Curtis anticipates that the
382 Review Team should have additional cases to review by March 2017.

383 384 **Other Business Continued**

385
386 Dr. Edinboro reminded the Committee that the toxicology seat on the SAC will need to be filled.

387
388 The DNA Subcommittee will meet prior to the next Committee meeting in May to discuss the
389 Forensic Biology Fusion Validation. Mr. Jenkins will send the validation report to the
390 subcommittee members in early 2017.

391 392 **Public Comment**

393
394 None.

395 396 **2017 Meeting Dates**

397
398 The Scientific Advisory Committee's 2017 meetings were scheduled for Tuesday, May 23, 2017,
399 and Wednesday, October 11, 2017.

400 401 **Adjournment**

402
403 Dr. Edinboro asked if there was a motion to adjourn. Dr. Cotton made a motion to adjourn the
404 meeting of the Scientific Advisory Committee, which was seconded by Mr. Zercie and passed by
405 unanimous vote.

406
407 The meeting adjourned at 10:40 a.m.