

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20

**Final Minutes**  
**Scientific Advisory Committee Meeting**  
**April 20, 2021**  
**Department of Forensic Science, Held Electronically**

21  
22

**Committee Members Present**

23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46

Randall E. Beaty  
Maureen C. Bottrell  
Kathleen Corrado, Ph.D.  
Leslie E. Edinboro, Ph.D.  
Linda C. Jackson  
Marc A. LeBeau, Ph.D.  
George C. Maha, Ph.D.  
Richard P. Meyers, *Chair*  
Kristin Schelling  
Travis Y. Spinder  
Jami J. St. Clair  
Kenneth B. Zercie

**Committee Members Absent**

Robin W. Cotton, Ph.D.

**Staff Members Present**

Jeffrey D. Ban, Central Laboratory Director  
Nancy L. Batterson, Forensic Administrative Specialist III, *Secretary*  
Sabrina S. Cillessen, Physical Evidence Program Manager  
Leslie H. Ellis, Human Resources Director  
Katya N. Herndon, Chief Deputy Director  
James W. Hutchings, Ph.D., Toxicology Program Manager  
Amy C. Jenkins, Department Counsel  
Bradford C. Jenkins, Forensic Biology Section Program Manager  
Alka B. Lohmann, Director of Technical Services  
M. Scott Maye, Northern Laboratory Director  
Jessica B. Norton, Legal Assistant  
Susan Stanitski, Eastern Laboratory Director  
Elise Stroble, Grants and Administrative Program Manager  
Jennifer L. Taylor, Procurement Specialist I  
Rebecca Wagner, Ph.D., Research Section Supervisor  
Robyn B. Weimer, Chemistry Program Manager

47 **Call to Order**

48

49 As a result of the state of emergency declared by Governor Northam due to COVID-19, the  
50 Scientific Advisory Committee conducted the meeting by electronic communication means using  
51 the Google Meet platform. The public was permitted to attend and participate via video or audio  
52 conference. Directions for public participation were provided on the meeting agenda and posted  
53 on Virginia’s Town Hall.

54 Mr. Meyers, the Chair of the Scientific Advisory Committee (“Committee” or “SAC”), called the  
55 meeting of the Committee to order at 10:03 a.m. Chairman Meyers welcomed Nancy Batterson as  
56 the new Secretary to the SAC and Dr. Marc LeBeau who was recently appointed to the seat  
57 designated for a toxicologist certified by the American Board of Forensic Toxicologists. He  
58 requested that Ms. Batterson call the roll to ensure that a quorum was present and that members  
59 take the opportunity to introduce themselves during the roll call. Ms. Batterson called the roll, and  
60 the members indicated their presence as follows:

61

- 62 Mr. Beaty – Present
- 63 Ms. Bottrell – Present
- 64 Dr. Corrado – Present
- 65 Dr. Cotton – Absent
- 66 Dr. Edinboro – Present
- 67 Director Jackson – Present
- 68 Dr. LeBeau – Present
- 69 Dr. Maha – Present
- 70 Mr. Meyers – Present
- 71 Ms. Schelling – Present
- 72 Mr. Spinder – Present
- 73 Ms. St. Clair – Present
- 74 Mr. Zercie – Present

75

76 After calling the roll, Ms. Batterson advised that a majority of the SAC members were present.  
77 Chairman Myers declared that a quorum was present.

78

79 **Adoption of Agenda**

80

81 Chairman Meyers advised that the first order of business was the adoption of the draft agenda for  
82 the meeting and noted that the agenda was previously shared with the Committee members. Dr.  
83 Edinboro made a motion to adopt the agenda, which was seconded by Ms. St. Clair.

84

85

86

87

88

89

90

91

92

93 A roll-call vote was taken, and the members voted as follows:

94

- 95 Mr. Beaty – Yes
- 96 Ms. Bottrell – Yes
- 97 Dr. Corrado – Yes
- 98 Dr. Edinboro – Yes
- 99 Director Jackson – Yes
- 100 Dr. LeBeau – Yes
- 101 Dr. Maha – Yes
- 102 Mr. Meyers – Yes
- 103 Ms. Schelling – Yes
- 104 Mr. Spinder – Yes
- 105 Ms. St. Clair – Yes
- 106 Mr. Zercie – Yes

107

108 The motion carried, and the agenda was adopted.

109

110 **Adoption of Minutes of the October 14, 2020 Committee Meeting**

111

112 Chairman Meyers noted that the draft minutes from the July 14, 2020 meeting were previously  
113 shared with the Committee and asked if there were any proposed changes. He requested that the  
114 language on lines 65 and 66 be made past tense. Ms. Schelling made a motion that the minutes be  
115 approved with the recommended amendments. The motion was seconded by Dr. Corrado.

116 A roll-call vote was taken, and the members voted as follows:

117

- 118 Mr. Beaty – Yes
- 119 Ms. Bottrell – Yes
- 120 Dr. Corrado – Yes
- 121 Dr. Edinboro – Yes
- 122 Director Jackson – Yes
- 123 Dr. LeBeau – Abstained
- 124 Dr. Maha – Yes
- 125 Mr. Meyers – Yes
- 126 Ms. Schelling – Yes
- 127 Mr. Spinder – Yes
- 128 Ms. St. Clair – Yes
- 129 Mr. Zercie – Yes

130

131 The motion carried, and the minutes were adopted with the recommended amendments.

132

133 **SAC Chair's Report**

134

135 Chairman Meyers did not make a report.

136

137

138

139 **DFS Director's Report**

140

141 Agency Updates

142 Director Jackson updated the Committee on the actions the Department has taken in response to  
143 COVID-19, including the development of internal disinfection capability, continuing to encourage  
144 alternate work schedules and teleworking when possible, and offering the COVID-19 vaccine to  
145 staff. The Department has been able to maintain examination capabilities in all laboratories,  
146 although there have been sections or areas in the laboratories closed temporarily for cleanings.

147

148 Workload Statistics:

149 Director Jackson provided statistics on case submissions and the backlog for each of the scientific  
150 disciplines, comparing the first quarter of calendar year 2020 to the same quarter in 2021. She  
151 noted that overall submissions were down since the COVID-19 pandemic began, but pointed out  
152 that the most drastic change has been in the Controlled Substances Section. For three years prior  
153 to the pandemic, the Controlled Substances Section had seen increased submissions, but there has  
154 been a significant drop in submissions since the pandemic. The drop in Controlled Substances case  
155 submissions, combined with the fact that the Section had finally become fully staffed, allowed the  
156 Section to reduce its backlog by 85% between March 2020 and March 2021. The Department has  
157 been using Controlled Substances staff in other disciplines and has been holding open positions  
158 that were vacated through attrition while it is assessing how best to staff the Section moving  
159 forward.

160 There are other Sections, however, where submissions have increased. The Toxicology and  
161 Firearms Sections have seen an increase in submissions over the past year, which has resulted in  
162 growing backlogs in both sections, as well as higher turnaround times.

163 Director Jackson also shared statistical trends, including quarterly data on backlog and turnaround  
164 times, for each of the scientific disciplines.

165

166 Central Laboratory Capital Project

167 Director Jackson provided an update on the status of the Central Laboratory project. She reminded  
168 the Committee that the new laboratory will not be in downtown Richmond, but will be built on a  
169 parcel of land in nearby Hanover County. She advised that the preliminary design drawings were  
170 approved and that, yesterday, the Department received notice of approval of its funding request to  
171 build a new facility, which differed from the initial request to expand/renovate the existing Central  
172 Laboratory. Although the project is approximately twelve weeks behind schedule, the Department  
173 is still hopeful it will be able to break ground for the new facility by the end of calendar year 2021.

174

175 Policy Notices

176 Director Jackson pointed out two policy notices sent to customers that have been posted on the  
177 DFS website. The first notice addressed latent print database search results and new clarifying  
178 language appearing on Certificates of Analysis for complex latent prints. The second notice  
179 described the impact of the national pipette tip shortage on the Forensic Biology Section.

180

181 Agency Initiatives

182 Director Jackson discussed the increasing use of testimony review evaluations by attorneys due to  
183 COVID-19 restrictions on the number of people allowed in courtrooms. While the Department's  
184 preference is to have scientists with the same competencies review the testimony of their

185 colleagues, given the current limitations, DFS developed a new Court Testimony Evaluation Form  
186 to assist with the request to have attorneys review an examiner's testimony.  
187 Director Jackson provided an update on three Laboratory Information Management System  
188 projects, including two under development, a prelog system for casework evidence submissions  
189 and tracking/prelog system for DNA Data Bank samples, as well as the Physical Evidence  
190 Recovery Kit (PERK) Tracking System, which is fully operational.  
191 Department Counsel created a new Legal Resources page on the DFS website, which includes  
192 information for attorneys such as how to request various records from DFS and links to model  
193 court orders.

#### 194 Budget and Resources

196 Director Jackson reviewed the Department's biennial budget for FY21/FY22, including  
197 additional funding the agency received for three additional administrative positions (two IT  
198 positions and one finance management position) and for increased maintenance costs of  
199 laboratory equipment. The Department also received an additional FTE for a grant funded  
200 Chemistry Research position for Toxicology with authorization to spend the non-general funds  
201 from the grant.

#### 202 Grants:

204 Director Jackson presented information about two highway safety grants that the Department has  
205 applied for, one for the Breath Alcohol Section and another for the Toxicology Section. The  
206 Department will be requesting approval of these grants from the Forensic Science Board at  
207 tomorrow's meeting.

#### 208 Program Area Updates

##### 210 Division of Technical Services Update:

212 Alka B. Lohmann, Director of the Division of Technical Services (DTS), provided the Committee  
213 with a DTS staffing update, which included information on the reorganization of the Quality  
214 Assurance Section and positions in recruit for the Quality Assurance and Chemistry Research  
215 Sections.

216 Ms. Lohmann provided an accreditation update. DFS had been scheduled for an on-site  
217 surveillance visit in 2020, which was changed to virtual due to COVID. At the end of 2020, DFS  
218 requested and received a Scope Extension for the Forensic Biology Section in the Eastern and  
219 Western Laboratories to add Y-STR analysis, so now all four testing laboratories have that  
220 capability. Document Surveillance is scheduled for May 2021, and all documentation for the  
221 surveillance was submitted on April 1, 2021. Ms. Lohmann also noted that trigger pull is currently  
222 outside of the Department's scope of accreditation because the measurement uncertainty for trigger  
223 pull has not yet been estimated, but the Department is in the process of doing so.

224 Ms. Lohmann announced to the Committee that the 102<sup>nd</sup> Forensic Science Academy (FSA) class  
225 graduated on April 1, 2021, with the 103<sup>rd</sup> FSA set to begin April 26, 2021, and the 104<sup>th</sup> FSA on  
226 September 13, 2021.

227 Ms. Lohmann updated the Committee on the continuation funding of the Byrne Justice Assistance  
228 Grant Program, which has provided funding for a third part-time instructor for the Forensic  
229 Training Section and ensures three FSA sessions each year, as well as various short course  
230 offerings. She noted that, in response to positive feedback after courses went online as a result of

231 COVID, the Training Section is continuing to offer online courses interspersed with in-person  
232 trainings. She also updated the Committee on the Coronavirus Emergency Supplemental Funding,  
233 which ensures the continuity of operations and safety of personnel for the Breath Alcohol and  
234 Forensic Training Sections.

235

236 Chemistry Program Update:

237 Robyn Weimer, Chemistry Program Manager, started her Chemistry Program Area update by  
238 discussing the Trace Evidence Section and providing a Trace Evidence staffing update.

239 The Trace Evidence Section made revisions to its Standard Operating Procedures to further align  
240 with national standards. The changes included adding assessment of significance to comparison  
241 reports and incorporating the number of confirmed primer residue particles and their type into  
242 reports, as well as changes related to the preservation and handling of ignitable liquid and fire  
243 debris evidence.

244 Ms. Weimer provided a final update on the NIJ Fire Debris Grant. The final report on the grant  
245 was submitted to NIJ in March 2021, with a manuscript set to be published in the *Forensic*  
246 *Chemistry* journal in June 2021. The Trace Evidence Section is currently working to incorporate  
247 the proposed workflow into their analytical scheme.

248 Ms. Weimer provided a staffing update for the Controlled Substances Section and reviewed online  
249 trainings attended by Controlled Substances Section staff.

250 Ms. Weimer reviewed the list of six compounds DFS recommended to the Board of Pharmacy  
251 (BoP) in January 2021 for scheduling via the regulatory process. The compounds were considered  
252 by the BoP at its March meeting and are pending final approval.

253 Ms. Weimer gave an overview of the report DFS issued jointly with the Department of Criminal  
254 Justice Services, entitled *Drug Cases Submitted to the Virginia Department of Forensic Science*  
255 *Calendar Year 2019*. The report is issued annually and is available on the DFS website.

256 Ms. Weimer provided an update on the status of various Controlled Substances method changes  
257 related to cannabis testing, including updates to the semi-quantitative method in December 2020.

258 Ms. Weimer also discussed legislative changes enacted since last year in Virginia related to  
259 marijuana, including decriminalization, limiting searches based on the odor of marijuana, and  
260 legalization.

261

262 Forensic Biology Program Update:

263 Brad Jenkins, Forensic Biology Program Manager, began with an update on staffing and internal  
264 training for the Forensic Biology program area. Mr. Jenkins noted the completion of Y-STR  
265 training for staff in all four laboratories. He provided an update on the deployment of STRmix,  
266 which is a program that assists with DNA interpretation by providing a likelihood ratio as to  
267 strength of a DNA match.

268 Mr. Jenkins provided an update on the STRmix validation and the new Real Time PCR  
269 instruments.

270 Mr. Jenkins discussed the nationwide pipette tip shortage that resulted from the tips being used for  
271 COVID testing. The Forensic Biology Section uses the tips for robotics, and the shortage required  
272 the Section to return to manual DNA extractions. This required additional procedural training and  
273 the halt of liquid validation studies. A new supplier was located, and performance checks of the  
274 new tips are underway.

275 Mr. Jenkins advised that the DNA Research Section was awarded a grant to develop an automated  
276 or semi-automated differential extraction method.

277 Mr. Jenkins noted that the FBI Quality Assurance Standards require minimum continuing  
278 education each year. The DNA examiners statewide were able to attend the American Academy  
279 of Forensic Sciences meeting remotely in February 2021 to meet this requirement.

280 The Forensic Biology Section (Casework and Data Bank) had been scheduled to undergo an  
281 external audit in the summer of 2020, which was cancelled due to the pandemic, but was  
282 rescheduled and conducted in December 2020. The audit was under new Quality Assurance  
283 Standards that had been implemented in 2020.

284 Mr. Jenkins gave an overview of two DNA Data Bank projects. The first, which requires a  
285 legislative change, will create a system that agencies can use to check to see if a person was  
286 previously sampled for the Data Bank. The system will also have a prelog component that agencies  
287 can use to enter sample information prior to submitting the sample and, once the sample is received  
288 by the Data Bank, staff will be able to retrieve this sample information. The Data Bank is expected  
289 to start testing the system in the staging environment before the end of the year. The second project  
290 is an automated data exchange with State Police to check the Sex Offender Registry against the  
291 DNA Data Bank.

292

#### 293 Physical Evidence Program Update:

294 Sabrina Cillessen, Physical Evidence Program Manager, provided the Committee with an update  
295 on the Physical Evidence Program Area. She gave an overview of staffing for the Firearms &  
296 Toolmarks, Latent Prints & Impressions, and Digital & Multimedia Evidence Sections. She also  
297 discussed continuing education received by staff from the Latent Prints and Firearms Sections.

298 Ms. Cillessen explained how the Latent Prints Section changed its policy on searches of complex  
299 latent prints in the Automated Fingerprint Identification System (AFIS) and Next Generation  
300 Identification (NGI) databases, including changes to the search criteria, additional quality  
301 assurance steps, and reporting requirements to minimize the risks for more complex latent prints.

302 Ms. Cillessen reported on the Firearms Section's validation of the Cadre 3D scanner equipment,  
303 the Virtual Comparison Microscopy (VCM) for Comparison, and the Virtual Comparison  
304 Microscopy (VCM) for Screening/Grouping.

305 Ms. Cillessen described the Firearms Section's evaluation of the Uncertainty of Measurement  
306 (UoM) in the range determination method and why the determination was made not to include  
307 UoM on reports. She also provided an update on the evaluation of the UoM for the Trigger Pull  
308 method.

309 Ms. Cillessen noted that the Digital & Multimedia Evidence Section is close to implementing the  
310 use of the National Center for Missing and Exploited Children (NCMEC) database to provide  
311 reports of suspected exploited children to the investigating agency.

312

#### 313 Toxicology Update:

314 Dr. James Hutchings, Toxicology Program Manager, provided the Committee with an update on  
315 staffing in the Toxicology and Breath Alcohol Sections. He also discussed online  
316 meetings/conferences, which allowed staff from both sections to receive continuing education.

317 Dr. Hutchings shared information on the status of several Toxicology methods, including moving  
318 quantitation and confirmation of miscellaneous basic drugs and barbiturates from GC/MS to  
319 LCMSMS, as well updating the cannabinoid method to use more automation.

320 Dr. Hutchings advised that, as a result of the pandemic, drivers in Virginia travelled significantly  
321 fewer miles in 2020 as compared to 2019. However, he shared statistics reflecting that overall  
322 Toxicology case submissions increased from 2019 to 2020. Statistics for the Breath Alcohol

323 Section show a marked reduction in breath tests administered beginning in March 2020, and the  
324 reduced volume of tests has continued.

325 The Breath Alcohol Section continues to successfully provide in-person training for operators with  
326 restrictions to limit class sizes, but the number of classes offered was increased to offset the smaller  
327 classes.

328 Dr. Hutchings discussed two Breath Alcohol grants that, together, provide funding for a forensic  
329 scientist position, which helps the Section maintain its ability to offer licensing training to law  
330 enforcement, and for the purchase of classroom engagement tools, smartphones and other items to  
331 increase paperless capabilities and ensure the continuity of services during the pandemic.

332

### 333 **Old Business**

334

#### 335 Toxicology Method Validation/Verification Review Follow-Up:

336 Dr. Hutchings provided follow up regarding issues raised by the SAC at prior meetings related to  
337 methods previously reviewed by the Toxicology Subcommittee. One issue concerned validation  
338 parameters and potential interferents. Dr. Hutchings noted that the Department purchased the  
339 potential interferent and will be conducting testing with it. Another issue addressed validation  
340 parameters for limit of detection, lower limit of quantitation, and retention time acceptance criteria.  
341 DFS will modify its procedures manual and validation going forward. The last issue addressed was  
342 determining the limit of detection of previously completed validations instead of using an  
343 administratively determined threshold. Although the Department will be working on this  
344 evaluation for several methods, due to limited staffing and the fact that they are not commonly  
345 utilized methods, DFS anticipates completing this work for the October meeting.

346

### 347 **New Business**

348

#### 349 Toxicology Barbiturate Method Development and Validation Plan

350 Chairman Meyers advised that, in advance of the meeting, the Toxicology Subcommittee members  
351 reviewed the Method Development Summary and Validation Plan for the Barbiturate Quantitation  
352 and Confirmation by Liquid-Liquid Extraction Using LCMSMS. After reviewing the documents,  
353 the Subcommittee decided that a separate meeting to discuss the materials was not necessary.

354 Dr. Hutchings explained that the change to the barbiturate method represents an update, which  
355 transfers it from gas chromatography to liquid chromatography. The new method improves the  
356 extraction procedures and reduces the volume amount of the sample used, but there are two  
357 compounds that coelute with the new method so Dr. Hutchings explained that the old methodology  
358 will be maintained, and the procedures manual will specify that the old methodology is to be used  
359 in those instances to confirm the substance.

360 Chairman Meyers asked for a motion to close the review of the Toxicology Barbiturate Method  
361 Development and Validation Plan. Dr. Edinboro made a motion to close the review, which was  
362 seconded by Dr. LeBeau. A roll-call vote was taken, and the members voted as follows:

363

364

365

366

367

368



369 Mr. Beaty – Yes  
370 Ms. Bottrell - Yes  
371 Dr. Corrado – Yes  
372 Dr. Edinboro – Yes  
373 Director Jackson – Yes  
374 Dr. LeBeau – Yes  
375 Dr. Maha – Yes  
376 Mr. Meyers – Yes  
377 Ms. Schelling – Yes  
378 Mr. Spinder – Yes  
379 Ms. St. Clair – Yes  
380 Mr. Zercie – Yes

381  
382 The motion carried.

383  
384 Election of Chair and Vice-Chair

385 Chairman Meyers called for the annual election of the Board Chair and Vice-Chair and asked for  
386 nominations. Director Jackson nominated Ms. Schelling for Chair of the Board, and the  
387 nomination was seconded by Dr. Edinboro.

388  
389 A roll-call vote was taken, and the members voted as follows:

390  
391 Mr. Beaty – Yes  
392 Ms. Bottrell – Yes  
393 Dr. Corrado – Yes  
394 Dr. Edinboro – Yes  
395 Director Jackson – Yes  
396 Dr. LeBeau – Yes  
397 Dr. Maha – Yes  
398 Mr. Meyers – Yes  
399 Ms. Schelling – Abstained  
400 Mr. Spinder – Yes  
401 Ms. St. Clair – Yes  
402 Mr. Zercie – Yes

403  
404 The motion carried, and Ms. Schelling was elected to be the next Chair.

405  
406 Dr. Edinboro nominated Mr. Beaty for Vice-Chair, and Ms. St. Clair seconded the nomination. A  
407 roll-call vote was taken, and the members voted as follows:

408  
409  
410  
411  
412  
413  
414

415 Mr. Beaty – Abstained  
416 Ms. Bottrell – Yes  
417 Dr. Corrado – Yes  
418 Dr. Edinboro – Yes  
419 Director Jackson – Yes  
420 Dr. LeBeau – Yes  
421 Dr. Maha – Yes  
422 Mr. Meyers – Yes  
423 Ms. Schelling – Yes  
424 Mr. Spinder – Yes  
425 Ms. St. Clair – Yes  
426 Mr. Zercie – Yes

427

428 The motion carried, and Mr. Beaty was elected to be the next Vice-Chair.

429

430 **Public Comment**

431

432 Chairman Meyers inquired whether any member of the public would like to provide any  
433 comments. No member of the public provided comment.

434 Director Jackson thanked Dr. Cotton and Mr. Spinder for their time and service to the Department  
435 as members of the Scientific Advisory Committee. Their terms on the SAC expire on June 30,  
436 2021.

437 **Future Meeting Date**

438

439 The Scientific Advisory Committee is next scheduled to meet on October 13, 2021.

440

441 **Adjournment**

442

443 Mr. Meyers asked if there was a motion to adjourn. Dr. Edinboro made a motion to adjourn the  
444 meeting of the Scientific Advisory Committee, which was seconded by Mr. Zercie. A roll-call vote  
445 was taken, and the members voted as follows:

446

447 Mr. Beaty – Yes  
448 Ms. Bottrell – Yes  
449 Dr. Corrado – Yes  
450 Dr. Edinboro – Yes  
451 Director Jackson – Yes  
452 Dr. LeBeau – Yes  
453 Dr. Maha – Yes  
454 Mr. Meyers – Yes  
455 Ms. Schelling – Yes  
456 Mr. Spinder – Yes  
457 Ms. St. Clair – Yes  
458 Mr. Zercie – Yes

459

460 The meeting adjourned at 12:06 p.m.