

**Minutes for the State of North Carolina
Forensic Science Advisory Board Meeting**

August 15, 2017

North Carolina State Crime Laboratory

Raleigh, NC

Board members present: State Crime Laboratory (SCL) Director John Byrd, Adam Becnel, Kermit Channell, Vice Chair Tracey Dawson Cruz, Demi Garvin, David Hinks, Michael Jiroutek, Alka Lohmann, Peter Marone, Bethany Pridgen, Deborah Radisch, Ronald Singer (all except Byrd via telephone)

Not present: Michael Coble, Chairman Tim Kupferschmid, Christopher Palenik.

Others in attendance: Ana Baxter (via telephone), Jonathan Dilday, David Freehling, Josh Hickman, Zach Kallenbach, Karen Morrow, Elizabeth Patel (via telephone), Jennifer Remy, Timothy Suggs, Kathy Schell, Amanda Thompson, Melanie Thornton, Peter Ware, Jody West (State Crime Lab); Stormie Forte (State Crime Lab Ombudsman); Sarah Rackley Olson, NC Indigent Defense Services (via telephone); Forensic Science Advisory Board Counsel Lauren Earnhardt (via telephone), State Crime Lab Counsel William Hart, Bradford Sneed (via telephone) (NC Department of Justice)

Meeting convened at 1:00 PM by Vice Chair Tracey Dawson Cruz. Motion to approve the minutes from the previous meeting as written was made by Kermit Channell, seconded by State Crime Lab (SCL) Director John Byrd, and passed by the board.

Latent Evidence and Tire & Toolmark protocol reviews have been completed. Forensic Science Advisory Board (FSAB) Counsel Lauren Earnhardt recommended that the board vote to approve those reviews as official actions. Ron Singer moved the board accept the reviews as written, Demi Garvin seconded and the board voted unanimously in favor of the motion.

Director Byrd had previously submitted a memo to the board soliciting its advice regarding a request for reinterpretation of prior DNA casework. The request was considered by the DNA subcommittee consisting of board members Kermit Channell, Tim Kupferschmid, Tracey Dawson Cruz, and Michael Coble. The subcommittee was asked to take seven issues into consideration. Members crafted unanimous responses on each item, which are contained in the Technical and Administrative Consideration memo attached to these minutes. For reasons stated in the document, the subcommittee did not recommend reinterpreting prior forensic DNA casework. Adam Becnel moved to accept the Technical and Administrative Consideration memo dated June 27, 2017. Bethany Pridgen seconded, and the board voted unanimously in favor of the motion.

Updates on new protocol reviews. Disciplines now under review are Trace Evidence, Forensic Biology Casework, and Drug Chemistry which was continued from the earlier round of reviews because additional time was needed. Bethany Pridgen reported that the Drug Chemistry group found different

versions of the SOPs as they worked their way through, and had to go back and verify they were looking at the most recent SOP. They are not prepared to publish their comments because they haven't had the opportunity to finish going over them with the Drug Chemistry staff. They hope to be able to deliver the final report at the next meeting of the board. David Hinks (Trace Evidence) and Kermit Channel (Forensic Biology) reported that work is continuing on their group's reviews.

Director's Report. Director Byrd presented his report, noting that turnaround time for the lab averages 115 days. Leadtime is around 243 days, and they are working to get that down to 200 days. ANSI-ASQ National Accreditation Board (ANAB) and Quality Assurance Standards (QAS) audits of the SCL were completed this summer. Some enhancements were recommended but no major issues were identified from either audit. ANAB's on-site reaccreditation for SCL is set for next year. May of 2018 will mark the SCL's 30th year as an accredited lab.

Director Byrd thanked Michael Jiroutek for helping to arrange a meeting with Dr. David Eagerton, the new chairman of Pharmaceutical Sciences at Campbell University. Dr. Eagerton was previously with the South Carolina Law Enforcement Division, and is a fellow of the American Board of Forensic Toxicology. He is supportive of SCL's efforts to collaborate. SCL is looking at helping Campbell with internships, and looking for help from Campbell with validations on the undergraduate and graduate levels. Demi Garvin noted that she and Dr. Eagerton were once colleagues.

SCL is waiting for final state approval on the AIS scanning project and the RFID project. Also working with Sarah Rackley Olsen of Indigent Defense Services to set up an open forum with SCL technical leaders and senior scientists. Tentative date is October 13.

Legislative actions. After multiple requests the General Assembly (GA) provided ongoing funding to pay for the previously unfunded mandates contained in the 2011 Forensic Science Act. These included the FSAB, accreditation costs, certification costs, and the Ombudsman position. GA also converted eight of SCL's 11 receipt-funded positions to General Fund positions. SCL had requested this change after being forced to leave a number of positions vacant in recent years due to insufficient funding from receipts.

However, GA also cut the Salary Reserve for all state agencies, reducing SCL's Salary Reserve by \$231,118. Salary Reserve has been used by SCL to pay for career progression promotions, in-line salary adjustments and other enhancements needed to increase employee retention. Prior to this reduction, promotions had been completed for employees in Toxicology, Drug Chemistry, and Forensic Biology & DNA Database. Promotions for employees in Latent Evidence and Firearms & Toolmark had to be paused due to the Salary Reserve reduction.

Other state budget items: GA provided nonrecurring funds in the amount of \$1.7 million for the purchase and/or lease of lab equipment, marking the first time SCL will be able to lease equipment. Office of the State Budget will carry money forward over the three-year life of the lease. When the funding is in-hand, SCL will start moving toward purchase or lease of big pieces of equipment. AD Amanda Thompson is working with the managers to develop that plan.

SCL consulted with the sponsor of a bill on sexual assault evidence collection kits to bring the legislation into workable form. The legislation mandates an inventory, and money had already been set aside to outsource the testing of the kits. The due date for inventories is January 1, 2018, but a few agencies are already submitting inventory information to SCL. SCL must report back to the GA by March RE: how many kits have been identified.

Kermit Channell: Great news on the leasing option. RE: the inventory, we did one and had great compliance the first year but it tapered off the 2nd year. Is yours 1-time, or is it required every year? Byrd: Its 1-time. We told the stakeholders that it was coming, and once the bill passed I set a letter explaining the requirements. Kits from the last 12-14 months will come to the SCL as usual. Agencies holding older kits will send inventory information to SCL for screening. Unless a kit is screened out, the agency will then send it to a vendor lab. If the vendor develops a DNA profile from the evidence, they submit it to SCL for Combined DNA Index System (CODIS) upload, and return the evidence to the sender.

Channell: FYI, the Idaho State Police have a good tracking system for sexual assault kits. It's free and their IT section is helping us develop it for our state. Something you might want to look into. Byrd: That's great information, we will get their contact information from you.

Byrd continues: Another important piece of legislation was the amendment to the Controlled Substances Act, which contained specific language targeted at opioids and Fentanyl. SCL's Ann Hamlin provided assistance in drafting the bill. North Carolina's law was out of date because last year's update bill got held up. This year there was a lot of support because of the opioid crisis. The bill passed early in the legislative session and the governor signed it immediately.

Demi Garvin question: Was this an effort to incorporate analogues and such into the law, to designate them controlled substances in a more rapid fashion? Byrd: Yes. They tried to make the law more encompassing, so they don't have to change it every time a garage chemist creates a new analog.

A late-night addition to the General Appropriation Act cut \$10 million from the Department of Justice. The Attorney General has already been forced to eliminate 45 positions in DOJ and will have to cut another 40 to 45 positions if the GA does not restore some funding. SCL was supposed to be protected from these cuts, but the need to provide severance packages for employees whose jobs were eliminated affected funding throughout DOJ including SCL.

Finally, Director Byrd pointed the FSAB to recent remarks by Deputy Attorney General Rod Rosenstein of US DOJ in which he responded to some criticisms of forensic science.

Technical Operations. AD Peter Ware: On our chart showing the backlog of cases pending, you'll see an uptick that leveled off around May and then started to go back up. There's been an increase in overall submissions to SCL. The Latent Evidence section has seen a 70% increase in 2017 over 2016, and there have been increases in Firearms and other disciplines. These have caused a temporary increase in our pending cases.

Peter Marone question: Is your increase in Latent Print cases due to local labs closing down? Ware: Yes. A few have closed and they have shifted their evidence to our facility. That's created a dramatic increase. We're working with those closing down their departments, and trying to level that out.

Ware continues: There's been a continual decrease in our turnaround time. Lead time went back up earlier in the year because we were working some older cases that were still in-house. Once they were done, that continued to drop. We're focused on getting leadtime under 200 days.

Administrative Operations. AD Amanda Thompson: Most of what I was working on came to a halt with \$10 million cut to DOJ. Regarding promotions, we are in the process of beginning the postings for Latent Evidence and Firearms, pending the financial resources needed to execute the promotions. SCL currently has 22 vacancies, of which 17 are scientists and five are support staff.

SCL has a security contract in place through the construction contract for the Western Regional Lab. We are taking steps to link the Raleigh and Triad labs with that system so everything can be monitored from one centralized location. That contract is currently being reviewed by the state.

A variety of HR actions have been in process but have been slowed by the change of administration with the new Attorney General and executive staff, and by the cuts to DOJ. Financially, everything has been on pause. The HR actions include polygraph tests for new hires, and random drug testing for all employees. RE: grant funding, the total for last fiscal year was \$3.9 million. We are pending award notification on the approximately \$4.4 million we have applied for in this fiscal year, and we continue to search weekly for additional grant opportunities.

Director Byrd: Still looking to the end of summer to begin moving into the new Western Regional Lab. The general contractor is finishing a few minor things. The state's approval and acceptance process is complex and mandatory. State Commissioning, part of the Office of State Construction, is working through their list. We've been told to expect final approval sometime in September, but the target date has moved a number of times.

Director Byrd stated that he is eligible for state retirement but the Attorney General has asked him to stay on and he's agreed to remain for two years.

Director Byrd thanked Jennifer Councilman for her work arranging the board's next meeting, to be held in Edneyville in October 23-25 at the site of the new Western Regional Lab. The board also tentatively set Thursday February 1st 2018 at 1:00 PM EST for the following meeting, to be conducted by telephone.

Demi Garvin question: Has anything changed regarding the way board members access current SCL protocols online? Byrd: Some changes will be taking place in the future and we will notify you when that happens. As in the past, if you have any problems contact IT.

Director Byrd notified board members that he would be sending an email about the Digital Evidence discipline, and requested responses from board members whose offices or agencies have that discipline. The email will consist of a series of questions, for his general knowledge.

Kermit Channell moved to adjourn the meeting, and the motion was seconded by Adam Becnel. The meeting adjourned at 2:25 PM.



State of North Carolina

FORENSIC SCIENCE ADVISORY BOARD

Raleigh, North Carolina

June 27, 2017

Tim Kupferschmid, Chair
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John A. Byrd
North Carolina State Crime Laboratory

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Wilmington (NC) Police Dept. Crime Laboratory

Deborah Radisch
North Carolina Chief Medical Examiner

Ronald L. Singer
Tarrant County (TX) Crime Laboratory

John Byrd, Director
North Carolina State Crime Laboratory
Department of Justice
121 E. Tryon Road
Raleigh, NC 27603

Dear Director Byrd,

This letter is in response to your memorandum dated May 18, 2017 concerning "Request for FSAB Advice Regarding Reinterpretation of Prior Forensic DNA Casework." In that memorandum, you listed seven items (labeled a – g) for the FSAB to take into consideration and to provide our opinion. Below lists your questions and our responses.

- a. Validation of a stochastic threshold: is there sufficient pre-existing data upon which to base the validation of a stochastic threshold for discontinued Identifiler kits and, if not, is it feasible to conduct a new validation study?

The FSAB does not believe there would be enough data from the original validation upon which to base a stochastic threshold. Typically, laboratories run extensive numbers of samples (in the realm of 1,000 or more capillary injections) at differing parameters to determine the stochastic threshold. It is impossible to conduct a new validation study based on laboratory parameters and conditions used in the laboratory several years ago. That environment no longer exists.

- b. New validation on new instrumentation: for any new validation study using Identifiler kits, given that the study would be accomplished using new instrumentation and the previously-validated analytical threshold would have to be re-validated, a new statistical calculation could not even be accomplished without the re-submission of DNA material; in which

case, would it not be more advisable to analyze the re-submitted material using current kits instead of conducting an entirely separate validation just for this purpose?

It is preferable to retest evidentiary samples using current instruments, reagents and protocols. Current instrumentation and kits will provide a fully validated system that is compatible with national standards and will provide enhanced sensitivity versus older kits and instruments.

- c. Competency testing and proficiency testing: how to best implement the June 6, 2016 “SWGDM Clarification on the Reinterpretation of Data Typed with Legacy Amplification Test Kits,” and what guides technical leader discretion as to the soundness of these actions?

Although it is possible to apply the clarification provided by SWGDAM (the best scientific method), giving more opportunity to exclude the individual, would be, as indicated in the above FSAB response, to retest any remaining sample utilizing the currently validated technology.

- d. Impacts on current forensic DNA operations (overall): multiple validations for future casework are underway or planned for Raleigh Laboratory; validations planned for Western Regional Laboratory in 2017; anticipated increase in casework/CODIS reviews related to untested sexual assault kits; 8 DNA analysts remain in training, with 6 not set for release to casework until December 2017 or later.

The FSAB understands these constraints and believes that any re-validation of old instruments and kits or routine reinterpretations of prior forensic DNA casework would inevitably set current operational plans behind.

- e. Impacts on current forensic DNA case workloads: how to prioritize requests for reinterpretation of prior forensic DNA casework and to manage such re-submissions without impacting efforts toward reduction of current inventory/lead time.

Based on the constraints mentioned above, the FSAB does not recommend routine reinterpretation of prior forensic DNA casework.

- f. Fiscal impact: how to support the additional costs of validations and competency/proficiency testing?

The FSAB understands these constraints and believes that any re-validation of old instruments and kits or routine reinterpretations of prior forensic DNA casework would inevitably affect planned fiscal operations for the laboratory.

- g. Weighing potential for case impact: whether “reinterpreted” statistical calculations is reasonably likely to impact any criminal case proceeding – that is, would new calculations have “a direct and material bearing” upon questions of guilt or innocence within the post-conviction context, or would shifts in statistical weight likely be far more subtle, especially where the positive association was strong in the first place?

Without the foundational validation support, it is not possible to state the impact on the weight of evidence through reinterpretation on individual cases. The FSAB does not recommend reinterpreting prior forensic DNA casework.

Sincerely yours,

A handwritten signature in black ink, appearing to read "T. D. Kupferschmid", written over a light gray rectangular background.

Timothy D. Kupferschmid, Chair