



REPORT OF THE STATE CRIME LAB OMBUDSPERSON



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INTRODUCTION

This report is prepared pursuant to N.C.G.S. 114-62, North Carolina State Laboratory Ombudsman, which requires in part, “The ombudsman shall make recommendations on a regular basis to the Director of the State Crime Laboratory and the Attorney General of North Carolina as to policies, procedures, practices, and training of employees needed at the Laboratory to ensure compliance with State and federal law, best forensic law practices, and to resolve any meritorious systemic complaints received by the ombudsman.” It is also prepared in the context of relevant sections of 2011 S.L. 19, the State Crime Laboratory Director’s Strategic Vision statement, the State Crime Laboratory’s Values statement, and the Laboratory Policy on Ethics and Conduct, as will be discussed in more detail below. Perhaps most importantly, it is prepared with the desire that in addition to their prominence for technical proficiency, the State Crime Lab be a role model in the advancement of forensic science best practices.

I. RECOMMENDATIONS FOR THE STATE CRIME LABORATORY

My preparation for this report confirmed that the State Crime Laboratory is well respected and considered to be doing excellent work. Accordingly, I have no recommendations for the lab’s technical operations other than to encourage them to maintain their already high standards.

My research did reveal four areas in which I believe the State Crime Laboratory could provide leadership in improving the science. These are: researching the advisability of conducting blind proficiency testing; limiting the effects of cognitive bias; promoting transparency; and collaborating with others who are willing to assist. Leadership in some of these areas is envisioned by S.L. 2011-19, which originally created the Forensic Science Advisory Board and the Ombudsman position and established the State Crime Laboratory as its own entity (rather than the “SBI Crime Lab”). Section 3 of the Session Law contains this language:

The State Bureau of Investigation (SBI) shall encourage and seek collaborative opportunities and grant funds for research programs, in association, whenever possible, with the university system or independent nationally recognized forensic institutions, on human observer bias and sources of human error in forensic examinations. Such programs might include studies to determine the effects of contextual bias in forensic practice (e.g., studies to determine whether and to what extent the results of forensic analysis are influenced by knowledge regarding the background of the suspect and the investigator’s theory of the case). In addition, research on sources of human error should be closely linked with research conducted to quantify and characterize the amount of error. Based on the results of these studies, and in consultation with the North Carolina Forensic Sciences Advisory Board, the North Carolina State Crime Laboratory should develop standard operating procedures (that will lay the foundation for model protocols) to minimize, to the extent possible, potential bias and sources of human error in forensic science. These standard operating procedures should apply to all forensic analyses that may be used in litigation.¹

While the State Crime Laboratory remained with the NC Department of Justice after the SBI was moved, as codified in N.C.G.S. 114-60 *et seq.*, the provisions of Section 3 have never been rescinded or amended, and the legislative directive for such action presumably remains.

¹ This provision mirrors Recommendation 5 of the National Research Council Report, Strengthening Forensic Science in the United States: A Path Forward (NAS Report) 24, 191 (2009).

1.1 Blind Proficiency Testing Investigation

The State Crime Laboratory conducts proficiency testing to ensure that scientists are competent and capable. Proficiency testing is required by the ANSI National Accreditation Board (ANAB) pursuant to ISO/IEC 17025:2017 standards. The State Crime Laboratory's testing is open, meaning that the forensic scientists know they are being tested. Some studies indicate that knowing one is being evaluated may cause that person to modify their behavior. Such modification in forensic science analysis can take the forms of taking extra time to get the analysis correct (since the result is known and the analysis is either right or wrong) or applying more scrutiny to the analysis than might normally be done with ordinary cases.² Some open tests are also considered to be easier than actual casework and thus not representative of in-practice proficiency.³

Most forensic laboratories do not currently conduct blind proficiency testing; however, approximately 26% of federal publicly funded forensic labs,⁴ the US military, and labs such as the Houston Forensic Science Center, which is of comparable size to the State Crime Laboratory, have instituted blind testing. These tests involve fabricated samples with known sources and results that are intermixed with casework assignments and are handled as if they are real cases. It has been noted that blind testing may be a closer simulation of actual casework in the proficiency process. The State Crime Laboratory should consider investigating whether some degree of blind proficiency testing in conjunction with their current program of open proficiency testing would be advisable, e.g., by surveying the field to determine whether blind proficiency is becoming recognized as a best practice and how other labs are incorporating it into their current proficiency testing regimens.

Advocates of blind proficiency testing contend that it not only tests the aptitude of the individual scientist but also the effectiveness of the system of processing casework, the technique being used, and actual malfeasance.⁵ Some commentators have stated “[I]n aggregate, the data from widespread implementation of blind proficiency tests could improve understanding of both individual performance and errors in forensic techniques as applied in practice, and if and how performance varies between disciplines. Implementing blind proficiency testing has the potential to enable better accountability for forensic laboratories, and it could lead to reducing errors in forensic science.”⁶

As noted above, not all forensic laboratories currently conduct blind proficiency testing. Reasons may include cost, additional personnel needs, implementation issues, and a view that the benefit is minimal. In its investigation of the merits of blind proficiency testing, the State Crime Laboratory should consider these pros and cons, as well as any others they may discover. I am happy to share the results of my own research.

Naturally, the Lab's investigation into best practices around blind proficiency testing will take time to accomplish. If the Lab determines to move forward with blind proficiency testing, it will then require the development of policies and procedures and securing additional resources to conduct the actual testing. The North Carolina State Crime Laboratory has an opportunity to be a thought leader in this space and should investigate the blind proficiency process thoroughly.

1.2 Cognitive Bias

Cognitive bias is a universal human condition that results from the brain's seeking to save processing time. People can have no ill intent or overt prejudices and still be subject to cognitive bias. In the lab setting, cognitive bias can be triggered when forensic scientists are given task-irrelevant information, such as the suspect's race, whether he or she

² See, e.g., Robin Mejia, et al., *Implementing blind proficiency testing in forensic laboratories: Motivation, obstacles, and recommendations*, 2 *Forensic Science International: Synergy*, 293-296, 294 (2020) (“Further, research has found that examiners behave differently during proficiency testing than during routine analyses, e.g., dedicating additional time to analyses.”) (footnotes omitted), available at <https://www.sciencedirect.com/science/article/pii/S2589871X20300577?via%3Dihub> (last visited Apr. 30, 2024).

³ *Id.* (“[F]or some disciplines, commercial forensic proficiency tests have been shown to differ substantially from casework, both in terms of tasks and difficulty.”) (footnote omitted)

⁴ Connor Brooks, Bureau of Justice Statistics, NCJ 306473, *Publicly Funded Forensic Crime Laboratories, 2020 Table 14* (2023), available at <https://bjs.ojp.gov/library/publications/publicly-funded-forensic-crime-laboratories-2020> (last visited Apr. 16, 2024).

confessed, the circumstances of the alleged crime, and other potentially prejudicial case facts that have nothing to do with the analysis. The Guiding Principles of Professional Responsibility for Forensic Science Providers and Forensic Personnel, which the State Crime Lab has adopted, mandates, “Conclusions are based on the evidence and reference material relevant to the evidence, not on extraneous information, political pressure, or other outside influences.”⁷

Exposure to potentially biasing evidence can be limited by filtering the information presented with the sample for analysis when cases are assigned. However, cognitive bias can also occur when scientists see biasing task-relevant evidence, which is harder to circumvent. A way of limiting cognitive bias’s effect is to perform sequential unmasking, or delaying exposure to task-relevant information as late as possible in the examination and only when it must be accessed.⁸ This can take the form of requiring lab scientists to first examine the evidence from the crime scene (the unknown or questioned sample) and document its qualities before examining the reference material (the known sample) and then comparing the two.⁹

The State Crime Laboratory is to be commended on what it has done to address cognitive bias. It has implemented procedures for comparative analysis that require review of the questioned items first and documentation to that effect, and management continues to monitor the state of research on bias and to revise procedures accordingly. The Lab also instructs forensic scientists about cognitive bias to promote knowledge and awareness as part of their Analyst Academy training. Further, the Lab encourages scientists to attend conferences and to discuss the issue within their respective forensic communities. Lab management is attuned to the National Institute for Standards and Technology (NIST) Organization of Scientific Area Committees for Forensic Science (OSAC) standards, with lab staff serving on these committees, and implements new standards when they are posted to the OSAC Registry of Standards. As cognitive bias is a prevalent issue, language about how to mitigate it is often included in new standards.

However, the State Crime Laboratory could expand on what it is doing to reduce the impact of cognitive bias. Being aware that there is such a thing as cognitive bias is not enough to prevent its influence, and, in fact, it may be counterproductive by making scientists complacent and thus more susceptible to cognitive bias.¹⁰ In addition to the steps the Lab has taken, I recommend that the Lab consider employing case screeners to remove task-irrelevant and potentially biasing information from what is conveyed to the scientists when they are assigned cases. If hiring additional staff to perform this function is not feasible, the screeners could be section managers or supervisors, and their handling assignments in this way could also facilitate blind proficiency testing as described above. In sections where managers and supervisors must perform case work, their assignments could come from leaders in other sections or someone at a higher management level. Scientists’ access to task-irrelevant information should be limited as much as possible, including masking it in Forensic Advantage.

Perhaps the leading expert on cognitive bias in forensic science is Dr. Itiel Dror. Dror has written extensively on the subject and is a proponent of the Linear Sequential Unmasking (LSU) method of analysis as a means of reducing the impact of cognitive bias. LSU enhances sequential unmasking by imposing requirements on how and to what extent comparative discipline scientists can change their initial opinions after viewing reference samples.¹¹ Dror has revised the LSU approach to include minimizing bias in all disciplines, not just the comparative ones, through the LSU-E (Expanded) method, which suggests how to order exposure of evidence to better limit bias.¹² The Lab should consider implementing at least some of Dror’s recommended approaches. Disclosure of evidence in the proper order and subsequent

⁷ American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB), *The Guiding Principles of Professional Responsibility for Forensic Science Providers and Forensic Personnel*, 1 at numeral 1. (2009), available at <https://anab.qualtraxcloud.com/ShowDocument.aspx?ID=6732> (last visited Apr. 19, 2024); incorporated by reference in North Carolina State Crime Laboratory Policy on Ethics and Conduct as Appendix A.

⁸ Itiel E. Dror et al., Context management toolbox: a Linear Sequential Unmasking (LSU) approach for minimizing cognitive bias in forensic decision making, 60 *J. Forensic Sci.*, 1111–12 (2015), available at <https://onlinelibrary.wiley.com/doi/full/10.1111/1556-4029.12805> (last visited Apr. 12, 2024).

⁹ *Id.* at 1111.

¹⁰ Interview with Adele Quigley-McBride., Assistant Professor of Psychology, Simon Fraser University (Jan. 11, 2024).

¹¹ Dror, *supra* note 8 at 1111, 1112.

¹² Itiel E. Dror & Jeff Kukucka, *Linear Sequential Unmasking-Expanded (LSU-E): A general approach for improving decision making as well as minimizing noise and bias*, 3 *Forensic Sci. Int.: Synergy* 100161 (2021) available at <https://www.sciencedirect.com/science/article/pii/S2589871X21000310?via%3Dihub> (last visited Apr. 12, 2024).

disclosure via documentation of the substance of the evidence, the stage at which it was accessed, its context with decisions that were made, and any issues affecting the scientist at the time are facets of what is called a “forensic disclosure” model.¹³

Adele Quigley McBride has partnered with Dror and others to develop a tool for using LSU-E in case analysis. They term it an “information management framework,” and they have created a worksheet for use in developing standard operating procedures (SOPs) and by screeners in case assignment.¹⁴ Quigley-McBride concedes that use of the tool could result in delay and backlogs and suggests implementing parts of it and/or using it in training.¹⁵ Quigley-McBride’s materials are available for free upon request of her,¹⁶ and I have access to them.

While the Lab weighs what further steps to take to mitigate cognitive bias, individual forensic scientists can do their part. Kimberly Kunkler and Tiffany Roy recommend the following specific steps:

1. *Use sequential unmasking.* Evaluate, analyze, and document questioned samples first, indicating when in the analysis the known samples were first seen and the criteria to be used in comparison, as well as perhaps requesting additional reference samples to conduct a “line up” of evidence.
2. *Avoid task-irrelevant information:* Do not read investigation information and defer from discussing task-irrelevant case information with others.
3. *Minimize effects of task-relevant information and personal factors.* Document details of contextual information, including what was learned, when it was learned in the process, whether it was task-relevant or not, and what impact it may have had in decision-making, as well as any personal factors (including emotional impacts of a case, decision fatigue, vicarious trauma, or burnout) that may have affected analytical decisions.
4. *Minimize base rate expectations (discipline-specific or experience-based).* Reorder work notes to reflect analysis of the unknown before the known samples and follow with interpretations and conclusions, and ask questions about alternative theories at different analytical stages.
5. *Recognize allegiance effects.* Be aware of feeling like one is working is for a “side” in the system and continue to be accessible to all criminal justice professionals.
6. *Continue training on cognitive bias.* Monitor studies that identify new sources of cognitive bias and seek out training opportunities on the subject.
7. *Practice self-care.* Maintain healthy practices and a good work-life balance.¹⁷

Ultimately, implementing all these steps might prove to be time-consuming and thus largely impractical, but scientists’ adoption of at least some of them would confer additional trustworthiness to analytical conclusions. Lab management should be supportive if scientists decide to try any of them. In the alternative, as with the LSU-E worksheet described above, instruction on and experiential application of these steps could be part of a training regimen. To assist scientists who utilize their recommendations, Kunkler and Roy further suggest best practices for testimony about cognitive bias.¹⁸

¹³ Mohammed A. Almazrouei, et al., *The forensic disclosure model: What should be disclosed to, and by, forensic experts?*, 59 Int’l J. of L., Crime and Just. 100330 (Dec. 2019).

¹⁴ Adele Quigley-McBride, et al., *A practical tool for information management in forensic decisions: Using Linear Sequential Unmasking-Expanded (LSU-E) in casework*, 4 Forensic Sci. Int.: Synergy 100216 (2022), available at <https://www.sciencedirect.com/science/article/pii/S2589871X22000018> (last visited Apr. 12, 2024).

¹⁵ Interview with Adele Quigley-McBride., *supra* note 10.

¹⁶ *Id.*

¹⁷ Kimberly S. Kunkler & Tiffany Roy, *Reducing the impact of cognitive bias in decision making: Practical actions for forensic science practitioners*, 7 Forensic Sci. Int.: Synergy 10034, at 3-7 (2023), available at <https://www.sciencedirect.com/science/article/pii/S2589871X23000281?via%3Dihub> (last visited Apr. 12, 2024).

¹⁸ *Id.* at 7

I.3 Transparency

Transparency and openness promote trustworthiness.¹⁹ The State Crime Laboratory must maintain confidentiality of its case records to protect victims, the accused, and the public, and case records are considered records of criminal investigations and not public pursuant to G.S. 132-1.4. However, even given these constraints, the Lab has ensured that forensic scientists are available to discuss their analyses with assigned attorneys once the work is done and the discovery packages are delivered to the prosecution. The Lab has begun including QR codes on scientists' CVs, which are part of discovery packets, linking to a testimony [feedback survey](#) for court officials. The Lab also includes in the discovery packets the last several cases in which the scientists testified. The Lab maintains an online [Contact the Crime Laboratory](#) portal, which anyone can use to provide comments or ask questions. Policies and procedures are contained on a SharePoint site that can be accessed upon request, as completely public access could call into question the official nature of any printed documents. Attorneys can contact the Lab's General Counsel with case-specific questions, and he travels the state conducting outreach to various groups. The Lab conducts training for defense attorneys as well as for prosecutors and law enforcement. With the Policies and Procedures login credentials provided by the Lab, anyone can view the posted "Lunch and Learn" training presentations. The Lab offers tours of their facilities for the public, stakeholders, and any other interested group. These efforts are in line with the [Lab Director's Strategic Vision and Lab Values](#), both of which list transparency as goals.

While what the Lab is doing already is laudatory, the Lab could be still more transparent. Since the Lab is impartial and not on any adversarial "side," they might consider at some point conducting joint training such as a "Forensic Academy" for mixed groups of stakeholders. Former Palm Beach County (FL) Sheriff's Office Crime Laboratory Director Cecilia Crouse is a proponent of transparency, and she has noted that whenever her office presented to prosecutors they "always reached out to the public defenders, and they always [said] yes. . . ."²⁰ An added advantage of combining prosecution and defense attorneys, and perhaps even law enforcement, in a non-adversarial setting is that it may foster better communication and understanding amongst all parties. I believe that increased exposure of judicial players to scientists, and vice-versa, can lead to less challenging encounters and more productive relationships.

As discussed above in Section I.2, the forensic disclosure model is an important means of transparency. Another is making quality records (QRs) of investigations into scientists' non-conformance available to the judicial system. Scientists are human, and humans make errors. Often, those errors are simple mistakes that can be corrected and learned from. Admitting to errors and demonstrating corrective steps can make scientists more credible in court²¹ as well as demonstrate that they have nothing to hide. Of particular benefit is disclosing errors made during training, including continuing education training, and corrective steps taken.²²

Currently, the Lab posts non-case-specific Quality Assurance Records (QARs), nonconformity records (NCRs), Corrective Action Records (CARs), and Risk Management Records (RMRs) on its SharePoint site with its policies and procedures, access to which is available upon request, as noted above. These records are fully searchable. While not available on the Lab's website, case-specific QARs for forensic scientists can be accessed via a court order. The Lab will also release through discovery any case-specific records that are related to or that potentially affect the case at hand and will notify parties when a procedure has been found to be non-conforming and may have impacted multiple case results.

In addition to these practices, the Lab should investigate how to provide all, not just some, of scientists' QRs in discovery. When a forensic scientist is to be a witness, defense counsel and prosecutors should know about all quality issues, not just the most recent ones, so that the defense can adequately impeach witnesses and the prosecution can prepare for any potential pitfalls. As noted above, it might also benefit scientists' credibility to acknowledge their

¹⁹ Carlos Miguel Ibaviosa & Jason M. Chin, *Beyond CSI: Calibrating public beliefs about the reliability of forensic science through openness and transparency* 62 *Science & Justice* 272-283 (May 2022), available at <https://www.sciencedirect.com/science/article/abs/pii/S1355030622000235?via%3Dihub> (last visited Apr. 18, 2024).

²⁰ Cecilia Crouse, *Just Science: Just Cognitive Bias Awareness* *Just Science* (2018), <https://nij.ojp.gov/library/publications/just-science-just-cognitive-he-bias-awareness> (last visited Apr. 18, 2024).

²¹ Interview with Adele Quigley-McBride, *supra* note 10; interview with Peter Stout, CEO, Houston Forensic Science Center (Jan. 4, 2024).

²² Heidi Eldridge, et al., *The benefits of errors during training*, 4 *Forensic Science International: Synergy* 100207 (2022).

mistakes and to demonstrate that they have learned from such errors. If providing this much information through discovery is too cumbersome for the Lab, they should look into whether they could create a special SharePoint site, organized and cordoned by scientist, and include the link to the individual scientist's page in discovery packets.

The State Crime Laboratory might also consider conducting public comment periods for changes in policy or procedures that would affect stakeholders. If a completely open process would be too cumbersome, a group of representative stakeholders who might be impacted, including the bench, victims, law enforcement, the defense, the prosecution, and others, could be consulted on potential changes.

Finally, the Lab should embrace transparency not only externally but internally. While the Lab is quite large, with approximately 200 positions, staff should be consulted as much as possible and informed about what decisions are made, including any that are recommended in this report. I applaud the Lab to the extent this is already being done, but my experience is that additional internal transparency would be valuable and appreciated. If the volume and/or frequency of communication is found to be sufficient, ways to improve the impact and understanding of communication should be investigated. Such efforts will further the purpose of the Lab Director's Strategic Vision regarding "setting the bar . . . for employee engagement."

I.4 Collaboration

If the State Crime Laboratory decides to investigate and/or implement changes based on these recommendations, they should know they do not have to proceed alone. Many people I talked to are willing to assist the Lab in this process. For example, Peter Stout at the Houston Forensic Science Center would welcome visitors to the lab as well as come to Raleigh to discuss blind proficiency testing.²³ He could connect the Lab with other proponents of blind proficiency testing such as the Texas Forensic Science Commission (TFSC) and NIST, and he would also be willing to share testing materials to get the Lab started.²⁴ Robin Mejia, Co-Director of the Center for Statistics and Applications in Forensic Evidence (CSAFE) and Jeff Salyards, CSAFE Research Scientist, offer CSAFE's assistance with implementing blind testing at any level desired, ranging from giving advice, planning meetings, procuring evidence, developing workarounds for Forensic Advantage, creating fake crime scenes and training for law enforcement, and analyzing results.²⁵

Another member of the CSAFE Leadership Team, Brandon Garrett, Director of the Duke Law Wilson Center for Science and Justice, has likewise extended a helping hand. Garrett notes that the Wilson Center could collaborate with the Lab on conducting a blinding study, obtaining Coverdell grant funding (in addition to what the Lab already receives), and training.²⁶ As noted above, Section 3 of S.L. 2011-19 prescribes "seek[ing] collaborative opportunities and grant funds for research programs. . . ." The State Crime Laboratory has existing partnerships with RTI and with North Carolina State University, among others. The Lab assists others conducting studies, such as the second Ames Laboratory firearms error rate study (Ames II)²⁷ and the recent FBI latent black box study (LBB22)²⁸ Assuming sufficient time and resources, these partnerships might be leveraged to collaborate on blind testing and error analysis, and again, RTI could provide simulated tests. And, as previously noted in Section 1.2, Adele Quigley-McBride will provide free cognitive bias training materials and would likely be amenable to consultation.

The Lab might want to participate in a consortium of labs to obtain testing materials, conduct research, and exchange information. Additionally, I am willing to be of assistance in any way on this front, including facilitating introductions, planning meetings, or simply being a sounding board.

²³ Interview with Peter Stout, *supra* note 21.

²⁴ *Id.*

²⁵ Interview with Michael (Jeff) Salyards, Ph.D., Research Scientist, Center for Statistics and Applications in Forensic Science (Mar. 22, 2024).

²⁶ Interview with Brandon Garrett, Director, Wilson Center for Science and Justice (Feb. 5, 2024).

²⁷ Keith L. Monson, et.al., Accuracy of comparison decisions by forensic firearms examiners (October 1, 2022), available at <https://onlinelibrary.wiley.com/doi/full/10.1111/1556-4029.15152> (last visited May 15, 2024).

²⁸ See Latent Print Examiner Black Box Study 2022 Request for Participation (Feb. 28, 2023), available at chrome-extension://efaidnbmnnpbpcjpcglclefindmkaj/https://www.theiai.org/docs/LBB22-RequestForParticipation_2023-02-28.pdf (last visited May 15, 2024).

2. FURTHER RECOMMENDATIONS

Implementation of any of these recommendations may be challenging for several reasons. First, the State Crime Laboratory is hindered by having 40 vacant positions for a vacancy rate of 20%, significantly higher than the 10-16% rate the Lab has experienced in the past. It is difficult to perform the existing work with available staff, much less divert staff to new responsibilities like case screening. As a result, the Lab has requested support from the legislature to provide more competitive salaries to both attract and keep forensic scientists. While the Lab deserves the highest praise for ending the sexual assault kit backlog, lead times for new case submissions is exacerbated by lack of staff. The Lab is faced with understandable pressure from victims, defendants, the court system, and law enforcement to engage their services and to reduce lead times for results. Moreover, a large portion of Lab facilities, though renovated, are aging and require renovation and repair. The Lab needs additional funding to address these issues and will need more if they seek to introduce some of the efforts I suggest.

These challenges place an onus on others. For example, if the State Crime Laboratory decides to proceed with blind proficiency testing and further masking of information to mitigate cognitive bias, the Department of Justice should prioritize monetary requests to obtain materials and personnel in its budget advocacy. Allocation of funding from the General Assembly would then be needed to accomplish these goals. The Lab has expressed their deep gratitude for the work of both entities in the quest for additional funding, including promoting a proposed salary step system to improve recruitment and retention of lab staff and a recent legislative appropriation of \$1 million recurring funds for equipment.

Further, the North Carolina Department of Justice's Information Technology section would have to make any SharePoint enhancements. The North Carolina Office of Indigent Defense Services (IDS), the North Carolina Conference of District Attorneys (CDA), and law enforcement, as well as perhaps the Judges' Conferences, would need to agree to hold joint trainings. Making the Lab "the premier crime laboratory in the country," as the Lab Director's Strategic Vision statement prescribes, will require commitment from all parties.

In evaluating whether to implement any of these recommendations, I urge the State Crime Laboratory to focus first on how important and urgent the changes are, the risk of not making the changes, and the potential positive effects of the changes. Once these criteria are considered, the argument for necessary funds to accomplish the goals will be clearer and stronger.

3. CONCLUSION

As stated, I offer these recommendations not as criticism of the State Crime Laboratory but rather as encouragement to fulfill its potential. Implementation may be difficult but will likely prove rewarding. With a new Lab Director assuming the job, a new Attorney General taking office at the beginning of next year, and a legislative long session on the horizon, it will be a propitious opportunity for fully assessing and moving forward on these proposals. Again, I stand ready to assist in any way if the Lab entertains them. I firmly believe that any steps taken in this regard would further cement the Lab's reputation as a national leader.