Jerry J. Cox
President



November 7, 2013

National Institute of Standards and Technology
c/o Susan Ballou
100 Bureau Drive, Mailstop 8102
Gaithersburg, MD 20899

Dear Ms. Ballou,

Please accept this letter as the National Association of Criminal Defense Lawyers' comments on the formation and composition of Guidance Groups. The National Association of Criminal Defense Lawyers (NACDL) is a nonprofit voluntary professional bar association that works on behalf of criminal defense attorneys to ensure justice and due process for those accused of crime or misconduct. NACDL was founded in 1958. It has a nationwide membership of approximately 10,000 direct members in 28 countries, and 90 state, provincial and local affiliate organizations totaling 40,000 attorneys. NACDL's members include private criminal defense lawyers, public defenders, military defense counsel, law professors, and judges.

NACDL urges the National Institute of Standards and Technology (NIST) to form Guidance Groups dominated by scientists who are independent of law enforcement and inclusive of statisticians, researchers, and quality control experts. Since the National Research Council (NRC) issued its clarion call for reform of forensic science, NACDL has consistently advocated for implementation of the NRC's overarching recommendation – that the validity of forensic disciplines be examined and standards be set by an entity independent of law enforcement and dominated by a culture of science.[1]

In its 2009 report, *Strengthening Forensic Science in the United States: A Path Forward*, (the NRC report) the NRC found a dearth of empirical research underlying the forensic sciences. It concluded that many forensic disciplines relied upon by the justice system to convict and exonerate have

[1] National Research Council, *Strengthening Forensic Science in the United States: A Path Forward* (February 2009).

not been scientifically assessed to determine either their reliability or accuracy. Further the NRC found that many forensic analysts did not understand scientific methodology or understand the limitations of their discipline. To address these failures the NRC Committee was unequivocal in its foremost recommendation that the development of forensic science must be independent of law enforcement and must engage the larger scientific community and scientific methodology.

As a result, with the goal of developing forensic science into an objective tool grounded in science to assist the justice system, NACDL's priority recommendation for the creation of Guidance Groups is that each group be dominated by independent scientists; that statisticians, researchers, and quality control experts be included among these independent scientists; and that the role of stakeholders (prosecutors, forensic scientists, innocence advocates, judges, current forensic science professional organizations and defense attorneys) should be limited and be evenly balanced between law enforcement and defense.

Stakeholders can inform the process by describing how the results of forensic methods are used and misused in criminal cases. Stakeholders can describe the circumstances under which forensic practitioners work and can identify existing research and standards. And stakeholders can offer both criticisms and defenses of existing standards and practices. But stakeholders cannot be relied upon to assess the scientific validity of forensic methods or their limitations. Nor can stakeholders be relied upon to establish the standards under which forensic disciplines should be conducted and how results should be reported. If stakeholders, including the current community of forensic organizations, could have fully accomplished these tasks, crime labs would not be riddled with scandals, faulty forensic science would not be among the leading causes of wrongful convictions, and the scientific shortcomings identified in the NRC report would have been caught and corrected long ago.

NACDL opposes any effort to use existing organizations as the backbone of the Guidance Groups, and specifically opposes the transition of Scientific Working Groups (SWGs) into Guidance Groups. The SWGs are not independent of law enforcement; they were created by law enforcement and employees of law enforcement laboratories comprise a majority of the membership of individual SWGs.[2] Many SWGs' bylaws preclude the meaningful involvement of independent research scientists, whose only stake in any given forensic discipline is ensuring the use of sound science, in favor of practitioners, who have a stake in maintaining the status quo of their discipline.[3]

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[2] *See, e.g.*, Scientific Working Group for Friction Ridge Analysis, Study and Technology (SWGFAST), available at http://www.swgfast.org/Members.htm; Scientific Working Group for Firearms and Toolmarks (SWGGUN), available at (http://www.swggun.org/swg/index.php?option=com_content&view=article&id=46&Itemid=3); Scientific Working Group for DNA Analysis Methods (SWGDAM), available at http://swgdam.org/members.html; Scientific Working Group for Shoeprint and Tire Tread Evidence (SWGTREAD), available at http://www.swgtread.org/about-us/membership/current-membership);

[3] *See, e.g.*, SWGFAST bylaws at 3.1 (http://www.swgfast.org/Bylaws.htm) ("SWGFAST shall consist of up to 50 members involved in the discipline of friction ridge examination and shall include both latent print and tenprint practitioners. Members shall be from local, state and federal law enforcement agencies as well as the forensic community.")

SWG work product demonstrates this extreme imbalance in membership. For example, in the wake of the NRC report, the SWGs published written responses that were simultaneously defensive and failed to grasp the import of criticisms leveled at their respective disciplines.[4] Moreover, every written response to the NRC report by the SWGs rejected the notion that their discipline lacked the foundational research to individualize to an "extremely high" degree of certainty.[5] Given that it will be the Guidance Groups' mission to "monitor research and measurement standards gaps in each forensic discipline, and verify that a sufficient scientific basis exists for each discipline," clearly it is inadvisable to use organizations that have already firmly and publicly made up their minds on these key issues.

Further, the SWGs have not shown any significant leadership in reform or in instituting best practices. Instead the SWGs show extreme deference to practitioners' trade organizations and the variable practice in individual laboratories. This approach suggests a deliberate attempt to protect the admissibility of specific forensic methods and the admissibility of forensic evidence obtained without following best practices.

As a result most SWG guidelines – particularly those regarding interpretation of results – are so vague that they fail to provide any sort of standard for practitioners to follow. For example, SWGGUN's interpretation guidelines,[6] re-approved just last year (more than three years after the NRC report was published), are contained in a one page document that simply states "The

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[4] *See, e.g.*, SWGTREAD, Identification and Clarification of Inaccuracies in the National Academy of Sciences (NAS) Report, available at http://www.swgtread.org/images/documents/nas/nas_response_inaccuracies.pdf (referring to "misrepresentations" in the report and incorrectly identifying "inaccuracies" in a number of the NRC's conclusions about the discipline); SWGFAST, NAS Position Summary, available at http://www.swgfast.org/Comments-Positions/SWGFAST_NAS_Position.pdf. (brushing aside the NRC's concerns about bias with the statement that "the Committee has exerted a disproportionate amount of effort in addressing it", failing to understand the NRC's concerns about the unconstrained subjectivity of their discipline, defending the discipline's criticized methodology (ACE-V) as "a structured, logical procedure designed to minimize bias resulting in very few errors" and rejecting the NRC's recommendation that laboratories be independent of law enforcement).

[5] *See, e.g.*, SWGGUN, The Foundations of Firearm and Toolmark Identification (5/1/13), available at http://www.swggun.org/swg/index.php?option=com_content&view=article&id=66:the-foundations-of-firearm-and-toolmark-identification&catid=13:other&Itemid=43 ("[I]t is the conclusion of the Scientific Working Group for Firearms and Toolmarks (SWGGUN) that the discipline of Firearms/Toolmark Identification is scientific and reliable. Concomitantly, the identifications, individual associations or 'matches' effected in this discipline have firm scientific grounding with an extremely high degree of reliability based on the practical certainty of the validated theory. . . . The SWGGUN concludes that sufficient validation testing by competent examiners and collaborating scientists have been conducted to affirm the theory of firearm and toolmark identification over the past ninety years for it to be considered a legitimate science pursuant to the criteria set forth in the scientific method."); SWGFAST, NAS Position Summary (*see supra*) ("SWGFAST maintains that a significant body of constructive scientific research has already been conducted that addresses some of the concerns expressed in the report. . . . The NAS states 'With the exception of nuclear DNA analysis, however, no forensic method has been rigorously shown to have the capacity to consistently, and with a high degree of certainty, demonstrate a connection between evidence and a specific individual or source.' SWGFAST respectfully disagrees. History, practice, and research have shown that fingerprints can, with a very high degree of certainty, exclude incorrect sources and associate the correct individual to an unknown impression"); SWGSTAIN, Response to the NAS Report ("the foundation for these opinions is based upon well-established scientific principles. The scientific literature supporting these principles extends back more than one hundred years.").

[6] Available at http://www.swggun.org/swg/index.php?option=com_content&view=article&id=28:criteria-for-identification&catid=10:guidelines-adopted&Itemid=6.

laboratory shall adopt a Criteria for Identification as it pertains to the firearm/toolmark discipline." The only guidance about what bounds a laboratory's interpretation protocol should place on a practitioner's discretion is an endorsement of the firearm examiner trade association's definition of what constitutes "sufficient agreement" of toolmarks to declare a match to a particular firearm or other tool. Notably, this "sufficient agreement" statement was expressly criticized in the 2009 NRC report for its lack of specificity and guidance to practitioners. *See* NRC report at 155.

In addition, the SWGs' "standards" often let laboratories and individual practitioners decide what quality control measures to adopt, while ignoring best practices. For instance, instead of stating that laboratories "must" or even "should" implement blind verification procedures in fingerprint examinations, SWGFAST's only acknowledgment of blind verification is to treat it as a permitted practice.[7] Ignoring best practices in favor of vague and permissive guidelines is inconsistent with implementing sound science across a discipline. Instead this "guidance" allows labs to ignore best practices and still face little challenge when presenting evidence and/or testimony. The guidance provided by the SWGs is consistent with actors who are mindful that the wording of their guidance documents could carry legal implications for practitioners in their discipline. The courts routinely assess what is "generally accepted" by scientists when determining whether evidence obtained through a particular method can be admitted. In a system that assesses what is "generally accepted" in the field before admitting evidence, uniform standards incorporating best practices would be the undoing of labs who choose not to follow the guidance provided.[8] Protecting current laboratory practices and the admissibility of existing forensic methods must not factor into the decision-making processes of the Guidance Groups. Such non-scientific motives will not "improve the nation's use of forensic science and promote best practices and standards."

Instead of relying on existing forensic science organizations, the formation of the Guidance Groups must actively recruit independent research scientists and statisticians with the expertise to critically evaluate each forensic discipline. Guidance Groups staffed in this manner can assess the validity of specific forensic disciplines and set standards for validated methods that reflect the consensus of the larger scientific community. Such consensus standards will impact forensic practice at all levels (federal, state and local) as almost all court admissibility standards for specific scientific evidence include assessing the views of the larger scientific community on the validity of the methods and the standards by which the methods should be performed.

This is not to suggest that stakeholders should play no role on the Guidance Groups. As explained above, stakeholders can play a valuable, but limited, role. Even in this limited role, however, an additional level of balance must be struck. The stakeholder positions must be

[7] Available at http://www.swgfast.org/documents/blind-verification/121124_Blind-Verification_2.0.pdf.

[8] Further evidence of this focus on admissibility over sound science is the effort and amount of space on SWG websites devoted to "Admissibility Resource Kits", the goal of which is to ensure that a practitioner has the tools at hand to ensure his or her testimony is admissible at trial. *See, e.g.*, SWGGUN, http://www.swggun.org/swg/index.php?option=com_content&view=section&id=7&Itemid=8); SWGSTAIN, http://www.swgstain.org/resources/ark; SWGMAT, http://www.swgmat.org/2012%20fiber%20Daubert%20-%20final.pdf; SWGDOC, http://www.swgdoc.org/index.php/resources.

evenly divided between law enforcement and defense. Any imbalance between these two groups compromises the goal of independence.

When selecting representation for the defense, NIST should defer to the defense community to select its representative. The defense function and defense organizations are separate from the Executive Branch because of the adversarial nature of our criminal justice system. As a result, there is no defense function or defense organization within the Executive Branch. NACDL, on the other hand, is uniquely suited to identify dedicated criminal defense attorneys with expertise in the various forensic disciplines.[9]

NACDL is the largest criminal defense organization in the country. NACDL has an active Forensic Science Committee with members from a variety of jurisdictions, practicing in a variety of different court systems (state, local, and federal). NIST should consult with NACDL before selecting criminal defense representatives and give serious weight to NACDL's recommendations.

A final comment on the formation of the Guidance Groups is the need for transparency. The principle of transparency is essential to a fair and effective criminal justice system and is the hallmark of good science. The work of the Guidance Groups should be transparent and available for comment and review. Comment and review by scientists and stakeholders outside of the membership of the Forensic Science Commission and the Guidance Groups will advance the work of the Guidance Groups. The value of the reports prepared by the Guidance Groups will be determined not only by their content but also by the process under which they were created.

The National Academy of Sciences, long recognized as the most prestigious scientific organization in country, has established its reputation in part because of the exacting and transparent process the organization utilizes in researching and preparing its reports. This process includes meetings that are announced in advance and open to the public; submission of information by outside parties; review of the scientific literature; and investigation by the committee members and staff. Written materials submitted to the committee are maintained in a public access file that is available for examination. In all cases, efforts are made to solicit input from individuals who have been directly involved in, or who have special knowledge of, the problem under consideration. Once a draft report is prepared, the committee solicits individuals with expertise in the area being studied who have varying perspectives on the subject to provide comments. The committee must then respond to the reviewers' comments in some fashion either by accepting them and adopting the suggested changes or by providing a written "response to review."[10]

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[9] Kyle O'Dowd, NACDL's Associate Executive Director for Policy, may be reached at (202) 465-7626 or at kodowd@nacdl.org.

[10] The entire process is described on the National Academy of Sciences website (http://www.nationalacademies.org/studyprocess/).

This is an example of a process that allows a diverse group of committee members to work together productively and independently while at the same time providing the necessary transparency that ensures a broad range of perspectives will be evaluated and incorporated if scientifically appropriate. NACDL strongly recommends the Guidance Groups be established in a manner that fosters independence, peer review and public comment.

In conclusion, NACDL strongly believes that each Guidance Group should be dominated by independent scientists; that statisticians, researchers, and quality control experts be included among these independent scientists; and that the role of stakeholders (prosecutors, forensic scientists, innocence advocates, judges, current forensic science professional organizations and defense attorneys) should be limited and be evenly balanced between law enforcement and defense. Finally, the work of the Guidance Groups should be transparent and peer review and public comment should be encouraged.

Sincerely,

Jerry J. Cox
NACDL President