American Academy of Forensic Sciences
American Society of Crime Laboratory Directors
International Association for Identification
International Association of Forensic Nurses
National Association of Medical Examiners Society of
Forensic Toxicologists/ American Board of Forensic
Toxicology

The Honorable Charles Grassley
Chairman Senate Committee on the Judiciary
135 Hart Senate Office Building
Washington, DC 20510

The Honorable Patrick Leahy
Ranking Member Senate Committee on the Judiciary
437 Russell Senate Office Building
Washington, DC 20510

Dear Chairman Grassley and Ranking Member Leahy

Bias Elimination in Forensic Science to Reduce Errors Act of 2016

The Members of the Consortium of Forensic Science Organizations do not support the *Bias Elimination in Forensic Science to Reduce Errors Act of 2016* as drafted. It is the belief of our organization that this legislation deals with the admissibility of expert testimony and to a great degree is in direct conflict with case law and the Federal Rules of Evidence rather than assisting the forensic science community in addressing the matter of cognitive bias.

The forensic science community firmly believes and recognizes that the matter of cognitive bias is one that must be addressed. As such the community is actively participating in the existing working groups within the National Commission on Forensic Science (NCFS) and the Organization of Scientific Area Committees (OSAC) at the National Institute of Standards and Technology (NIST) to establish best practices and standards related to cognitive bias and determine how best to implement these in the forensic science community. Forensic science leaders are determining how to fund and implement the methods, personnel, training, and equipment necessary to have an impact on this issue. We propose that the Department of Justice provide funding to public laboratories so that they can hire the extra personnel, implement the evidence control mechanisms, retool laboratory information management systems (LIMS), and provide training, research, and development toward technological advances required for linear sequential unmasking of task-relevant information.

Background
The forensic science community recognizes that the issue of cognitive bias should be addressed and is taking proactive measures. However, this is a complicated issue. Law enforcement and forensic analysts in criminal cases confront a myriad of situations. The attempt to define the limits of task-relevant or task-irrelevant information will only prolong trials as the courts try to determine whether there has been compliance with this proposed legislation. No legislation can include all the circumstances that may arise in a case. In many instances what one analyst might think is task-relevant, another may not. Information may be relevant to an analysis for one forensic discipline, but not applicable for another discipline. This will lead to pre-trial litigation as expert's debate whether information is task-relevant. In fact, the courts have already addressed this issue. The Supreme Court in Daubert was explicit in its confidence in federal judges' capacity and capability to serve as gatekeepers for expert testimony. 113 S.Ct. 2786 at 2796.

A. Existing Organizations Reviewing Cognitive Bias:

   Processes are already being put in place to minimize task-irrelevant information from reaching the analyst. These groups are developing protocols for the elimination of biasing information. Compliance with these protocols will be an element of the judicial analysis of admissibility of scientific evidence. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 S.Ct. 2786, 2797 (1993) sets forth as one of its five suggested, but not exclusive, means of determining admissibility of expert testimony the "existence and maintenance of standards controlling the technique's operation." This factor would include whether the laboratory has a process in place to make sure that examiners do not receive biasing information.

   1. Analysts in federal, state and local forensic laboratories are now acutely aware of context, confirmation and other cognitive biases that may arise from receiving task-irrelevant information. NIST has already implemented analyses of cognitive bias in forensic science. Laboratories are starting to collaborate with experts in cognitive bias to develop best practices. The following are actions currently being taken by the forensic science community to address this issue:

      a. The Report of the Expert Working Group on Human Factors in Latent Print Analysis, published in February 2012, analyzed many forms of cognitive bias relating to latent print comparisons.

      b. Ongoing analysis by the Expert Working Group on Human Factors in Handwriting Analysis is also analyzing the same issues.

      c. The National Commission of Forensic Science's Subcommittee on Human Factors issued a views document entitled "Ensuring that Forensic Analysis is Based upon Task-Relevant Information." The views document describes how complicated this issue is, and has examples where some information may be task-relevant for some purposes and not for others. It also notes that there are several ways to minimize task-irrelevant information, and laboratories (including the FBI) are adopting methods to incorporate to those approaches. The views document also recommends that the standards and guidelines for forensic practice being developed by the Organization of Scientific Area Committees (OSAC) should specify what types of information are task-relevant and task-irrelevant for common forensic tasks.

      d. The OSAC has a Human Factors Committee that provides information to the Forensic Science Standards Board. Part of that committee's responsibility is to "Work with relevant SACs [Scientific Area Committees] and subcommittees on discipline specific human factors issues (e.g. determining domain irrelevant information)."

B. Legal Findings that have addressed the matter:

   1. The courts must retain discretion to admit scientific evidence. The Supreme Court in *Kumho Tire Company, LTD. v. Carmichael*, 119 S.Ct. 1167, 1176 (1999) said "[W]e conclude that the trial judge must have considerable leeway in deciding in a particular case how to go about

determining whether particular expert testimony is reliable." This legislation forces the courts down a path that might not be a fit in the particular case at hand, but nevertheless must be explored by the court. For example, the following evidence would be excluded under the proposed legislation:

a. In audio forensics the analyst hears the voice of the suspect, which may disclose gender, race, ethnicity and facts of the case.

b. In the case of a bank robbery where the teller is murdered, analysis of the bank video for facial recognition, or clothing pattern comparison involves viewing a photo of the person, revealing identifying "biasing" features. The same would occur with reverse projection photogrammetry of a bank video that helps identify the perpetrator's height.

c. A digital analysis of the origin or receipt of digital child pornographic images may require knowing the location of the suspect's computer to trace the route of the digital traffic. Analysis of emails would reveal the name of the suspect and the nature of the crime.

d. Experts often review reports from the opposing experts in litigation, and at times reanalyze the evidence and testify in court.

e. Next Generation Sequencing (DNA) has capability to determine racial admix and other physical features about the potential suspect and could be used to determine whether certain suspects should be further investigated. Current DNA capabilities have been used in selected cases to determine suspect hair color and racial background in serial homicide cases. These investigative aids can be invaluable in major cases, however will reveal potentially biasing features about the potential suspect.

All of the above expert testimony would be per se inadmissible, despite the fact that the courts have held that no single factor is necessarily determinative of admissibility. Importantly, the courts have eschewed bright line exclusionary or inclusionary rules regarding the admissibility of expert testimony. See *Heller v. Shaw Industries, Inc.*, 167 F.3d 146 (3rd Cir. 1999).

The courts must continue to have discretion. While an analyst may have received task-irrelevant information, the impact of information may be so de minimis that the evidence should nevertheless be admissible. This allows the jury to determine what weight to give the evidence. Under this proposed legislation, the court would have no discretion to allow the expert to testify. This would result in valuable evidence being excluded, depriving victims of a fair trial.

2. Pre-trial hearings will be necessary in **every** case; a finding that there is no biasing information is a statutory pre-requisite to admissibility under this proposed legislation. The court cannot wait for cross-examination of the expert during the trial for fear that a mistrial would have to be declared if it is disclosed that "biasing" information was considered by the expert. Even *Daubert* hearings are not required in every instance of expert testimony.

3. Federal Rule of Evidence 702 already allows the court to determine whether the expert is biased, and if so, whether the examination was so tainted that the expert's testimony is not

"helpful" to the fact finder. Helpfulness is a linchpin of Rule 702; so is reliability. If the expert was so biased with task-irrelevant information that her analysis was infected with irrepressible bias, then the analysis can be said to be unreliable, lacking evidentiary reliability, and therefore inadmissible.

4. Federal Rule of Evidence 703 allows an expert to base an opinion on facts or data in the case that the expert has been made aware of if experts in the particular field would reasonably rely on that kind of facts or data in arriving at an opinion. The facts or data relied upon by an expert do not need to be admissible for the opinion to be admissible. In *Williams v. Illinois*, 132 S.Ct. 2221 (2012) (a Sixth Amendment case), one DNA analyst relied upon an analysis from another laboratory to form an opinion on the source of the DNA. This type of reliance would violate the proposed legislation, and the result would be in conflict with Rule 703.

CFSO members have been very actively working with federal agencies and legislators to address this issue. If Congress is determined to take legislative action on this issue, CFSO believes the most constructive way is by providing essential funding for standards development, laboratory pilot studies, and grants for innovative solutions. We provide the following wording for consideration as possible legislation:

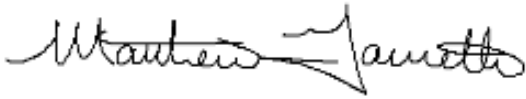**PROPOSED CONTENTS OF LEGISLATION**

APPROPRIATIONS LANGUAGE:
The Committee has been following the advancements in technology, training and education in forensic science to address potentials for bias in forensic science casework. However, the committee is aware that while recommendations are coming from the National Commission on Forensic Science, there is not funding to address these matters. Further, there is not a coordinating effort within the Department of Justice to gather the recommendations from the various Federal entities making recommendations for changes to the forensic science community. One issue in particular is research into methods such as sequential unmasking and blind verification of impression evidence results. As such the Committee is providing $5m to the National Institute of Justice to develop working models in public crime laboratories for addressing bias, providing best practices to the community developed from those models, developing a plan to implement technology based solutions to address this matter in coordination with the DOD and forensic science practitioner community where the Committee understands technology exists, provide funding to limit or remove potential bias through development of other software programs and modules within laboratory information management systems (LIMS) that will address best practices, and work with the OSAC to develop standards related to addressing bias.

AUTHORIZING BILL:

I. Office of Justice Programs
    a. State and Local Forensic Science Assistance
    b. Under Edward Byrne Memorial Justice Assistance Grants make additional amounts due for "expenses relating to blind testing to include education, training and technology development." $10m to remain available until expended.

c. Develop a study with the help of forensic science practitioners and pilot public forensic lab sites using processes to determine best practices.
II. Department of Commerce
   a. Develop standards in OSAC related to addressing bias in forensic disciplines.
   b. Design and develop models for various sizes and types of public forensic science service providers.
   c. Support implementation in the field by providing resources for training, disseminating best practices and linking practitioners.
   d. Publish standards, best practices and procedures, and supporting literature.

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Chair,
Consortium of Forensic Science Organizations