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President

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Comment by the National Association of Criminal Defense Lawyers on Department of Justice Proposed Uniform Language for Testimony and Reports

Docket No. DOJ-OLP-2016-0017

To Whom It May Concern:

The National Association of Criminal Defense Lawyers (NACDL) commends the Department of Justice (DOJ) for developing proposed uniform standards for testimony and lab reports generated by the Federal Bureau of Investigation (FBI), the Bureau of Alcohol Tobacco and Fircarms and Explosives, and the Drug Enforcement Administration. NACDL further commends the DOJ for releasing these standards for public comment, particularly for comment from the scientific community.

Since 2012, NACDL has worked collaboratively with the DOJ, the FBI, and the Innocence Project (IP) on the Microscopic Hair Comparison Analysis (MHCA) Review to examine more than 3,000 criminal cases in which the FBI conducted microscopic hair analysis of crime scene evidence and reported a positive association in order to identify cases in which FBI hair examiners made scientifically invalid statements in testimony or lab reports. As a result, NACDL has seen firsthand how pervasively hair examiners exaggeratcd their conclusions beyond what is supported by science when testifying in hair comparison cases.

Thus, this initiative by the DOJ, along with its commitment to making these efforts deliberative and transparent, is most welcome. In the spirit of that commitment, NACDL offers these comments on the proposed "Uniform Language for Testimony and Reports" (ULTRs) released for comment as Docket Number DOJ-OLP-2016-0017. Based upon its extensive experience reviewing testimony and lab reports in the MHCA Review, NACDL offers specific comments on the Proposed Uniform Language for Testimony and Reports for the Forensic Hair Examination Discipline.

NACDL is the preeminent organization advancing the mission of the criminal defense bar to ensure justice and due process for persons accused of crime or wrongdoing. A professional bar association founded in 1958, NACDL's approximately 9,000 direct members in 28 countries – and 90 state, provincial, and local affiliate organizations totaling up to 40,000 attorneys—include private criminal defense lawyers, public defenders, military defense counsel, law professors, and judges committed to preserving fairness and promoting a rational and humane criminal justice system. NACDL has a strong interest in ensuring the accuracy and reliability of all evidence that may be introduced to support a criminal prosecution.

The DOJ and FBI agreed to undertake the MHCA Review after three men who had served lengthy prison sentences were exonerated by DNA testing in cases in which three different FBI hair examiners provided testimony which exceeded the limits of science and contributed to their wrongful convictions (as discussed below, Error Type 3 contributed to those wrongful convictions). While the MHCA Review is ongoing, the results thus far have conclusively documented the extraordinary frequency of exaggerated testimony. The DOJ and the FBI agree that FBI examiner testimony exceeded the limits of the science in over 90% of trials reviewed.

As a result of its participation in this project, NACDL has unique insight into the nature and prevalence of testimonial overstatements made by FBI analysts. The results of the MHCA Review demonstrate the urgent need for clear, precise, and binding guidelines that govern the language used by forensic experts in both testimony and lab reports. It is NACDL's hope that if the ULTRs are developed with significant and meaningful peer review, they will finally set firm limits on the language that analysts may use to convey their results to a jury, which will aid in preventing the miscarriages of justice identified by the CBLA Review, the 2104 OIG Report on the DOJ Task Force Review of the FBI Lab, and the MHCA Review.

NACDL is very concerned that the proposed hair comparison standard does not fully and accurately reflect the accepted limits of that discipline and would not prevent the types of testimony found to be scientifically invalid by the DOJ and the FBI in the MHCA Review.

I. The MHCA Review Established the Scientific Limits of Appropriate Hair Comparison Testimony that Should Form the Basis of the Uniform Standard.

The MHCA Review identified three common types of scientific overstatements made by FBI hair examiners in testimony and in lab reports and categorized them into the "error types" discussed below. Moreover, as part of the MHCA Review, the DOJ and the FBI agreed upon what the science of microscopic hair comparison supports and established appropriate testimonial limits for the discipline (see attached Scientific Standards for Microscopic Hair Comparison Analysis). The DOJ and the FBI now recognize that statements that exceed those scientific limits are not supported and are scientific error. These erroneous statements have been found in over 90% of the hundreds of trials reviewed thus far in which FBI examiners testified. The ULTR for hair examination must be revised to fully incorporate those scientific standards and specifically to include Error Type 3, which the current proposed standard fails to do.

The DOJ and the FBI agreed standards define three categories of statements that exceed the limits of science and are inappropriate:

- **Error Type 1:** The examiner stated or implied that the evidentiary hair could be associated with a specific individual to the exclusion of all others.
- **Error Type 2**: The examiner assigned to the positive association a statistical weight or probability or provided a likelihood that the questioned hair originated from a particular source, or an opinion as to the likelihood or rareness of the positive association that could lead the jury to believe that valid statistical weight can be assigned to a microscopic hair association.
- **Error Type 3:** The examiner cites the number of cases or hair analyses worked in the lab and the number of samples from different individuals that could not be distinguished from one another as a predictive value to bolster the conclusion that a hair belongs to a specific individual.

In addition, the scientific standards adopted by the DOJ and the FBI for the MHCA Review delineate what a hair examiner's testimony must have included in order for the testimony to be appropriate. An examiner's testimony is only acceptable if it: "appropriately reflected the fact that hair comparison could not be used to make a positive identification, but that it could indicate, at the broad class level, that a contributor of a known sample could be included in a pool of people of unknown size, as a possible source of the hair evidence (without in any way giving probabilities, an opinion as to the likelihood or rareness of the positive association, or the size of the class) or that the contributor of a known sample could be excluded as a possible source of the hair evidence based on the known sample provided." Identification is not permitted. An opinion regarding rareness of an association would only ever be potentially appropriate with hair samples that have distinct unusual characteristics, such are certain diseases. (FBI Scientific Standards for Microscopic Hair Comparison Analysis).

II. The Approved Language in the Uniform Language for Testimony and Reports for Hair Examination Must Include a Statement With the Results of the Examination Regarding a Pool of Unknown Size.

The ULTR must specifically include language about inclusion in a pool of people of unknown size as a potential contributor of the hair in the sentence specifying what an examiner may appropriately state (see below for proposed modification to section 8). The proposed standard does later state in section 8 that "the number of individuals who could be included as a possible source of a specific hair is unknown." However, it is critical that the full limits of the discipline be communicated in testimony and reports, which requires an affirmative explanation by the examiner that the size of the pool of possible contributors is unknown. The current proposed guidance would not require the hair examiner to explain to a jury or judge that the pool of people who could have contributed the hair is unknown, which is absolutely critical to avoiding misleading testimony.

This could be remedied by adding the following underlined language from the MHCA Scientific Standards on "Appropriate" testimony to the first sentence of section 8:

> "The examiner may state or imply that the questioned human hair is microscopically consistent with the known hair sample and accordingly, the source of the known hair sample can be included in a pool of people of unknown size as a possible source of the questioned hair, without in any way giving probabilities, an opinion as to the likelihood or rareness of the positive association, or the size of the class. Microscopic hair comparisons are meaningful due to the variation in macroscopic and microscopic characteristics between individuals. However, the comparison of hair characteristics does not constitute a basis for personal identification and the number of individuals who could be included as a possible source of a specific hair is unknown."

III. Error Type 3 from the MHCA Review Must Also Be Included in Statements Not Approved For Use in Forensic Hair Examination Testimony and/or Laboratory Reports.

There is no scientific basis to provide a statistical weight, probability, or likelihood to the inclusion of someone as a possible source of a questioned hair. Yet, agents frequently substituted their own unvalidated, unscientific, anecdotal experience regarding the number of hairs from different individuals they could not distinguish to inappropriately bolster the conclusion that a hair belonged to a specific individual. This is deemed type 3 scientific error by the DOJ and the FBI; yet, it is not included in the current ULTR as a statement that is not approved for testimony or reports. This omission is extremely disturbing given the prevalence of this error in FBI hair examiner testimony. It must be corrected consistent with the definition of Error Type 3.

The DOJ and the FBI have acknowledged that it is impermissible for an examiner to use his or her experiences or memories of conducting previous comparisons to establish a connection which cannot be validly established using actual science. The MHCA Review shows that examiners routinely used their own experience to effectively communicate an unvalidated "error rate" and bolster the conclusions they offered to the jury. For example: "However, in my experience, in looking at hundreds and hundreds of hair samples, it's very rare for me to find two known head hair or pubic hair samples that I can't distinguish microscopically." And: "The ten thousand known samples I have looked at over the last fifteen years, and I have been keeping track of them, during that time I have only had two occasions out of those ten thousand known samples, where I had hairs from two different people, that I was not able to distinguish from one another..." (both found to be Error Type 3 by the DOJ and the FBI).

In fact, this specific type of scientific error in testimony by FBI hair examiners contributed to the wrongful conviction of at least three innocent individuals who were later exonerated by DNA testing.[1] This erroneous testimony has very real consequences, but without a specific inclusion

[1] For example, Kirk Odom was convicted and spent 22 years in prison based in large part on flawed testimony by an FBI examiner. The examiner used his experience to provide unsupported probabilities, stating there were "only eight or ten times in the past ten years, while performing thousands of analyses" that he had not been able to distinguish between two hairs from different individuals (MHCA Error Type 3). Mr. Odom was exonerated when DNA testing proved that he was actually innocent, and that the hair the analyst "matched" to him was not his.

of Error Type 3 as prohibited statements, such misleading statements would be permitted under the proposed standard.

IV. The DOJ Must Directly Solicit and Implement Feedback From the Scientific Community Outside of Legal and Forensic Practitioners.

Regarding the proposed uniform standards for other disciplines posted for comment on July 25, 2016, while NACDL commends the DOJ on its ongoing commitment to transparency, the release of the ULTRs on www.regulations.gov does not constitute a peer review of those standards. The federal government must engage independent scientists and statisticians to set the boundaries of acceptable testimony based on the accepted limits of each individual discipline. Therefore, NACDL continues to strongly encourage the DOJ to seek input on the ULTRs from statisticians and the scientific community, including from the NIST OSACs as they also work to develop standards. Moreover, it is unclear how the ULTRs will interface with the OSAC guidelines and the President's Council of Advisors on Science and Technology (PCAST) Report. The DOJ must firmly establish the role of the ULTRs and be explicit that they will not replace guidelines set by scientists based on actual discipline validation.

NACDL also asks the DOJ to clarify the process by which these comments are adjudicated and how feedback from the comments will be incorporated into the development of the final ULTRs. Clarification is also requested as to the next steps in this process, including the method for releasing updated/revised versions of the ULTRs after this comment period.

NACDL thanks the DOJ for its commitment to ensuring the accuracy of forensic testimony presented at criminal trials and looks forward to continued participation in this important endeavor.

Sincerely,

Barry J. Pollack
President, NACDL

MICROSCOPIC HAIR COMPARISON ANALYSIS

The following reflects an agreement between the FBI and the Innocence Project and the National Association of Criminal Defense Lawyers of what the science of microscopic hair examinations supports.

The scientific analysis of hair evidence permits a well-trained examiner to offer an opinion that a known individual can either be included or excluded as a possible source of a questioned hair collected at a crime scene. Microscopic hair analysis is limited, however, in that the size of the pool of people who could be included as a possible source of a specific hair is unknown. An examiner report or testimony that applies probabilities to a particular inclusion of someone as a source of a hair of unknown origin cannot be scientifically supported. This includes testimony that offers numbers or frequencies as explicit statements of probability, or opinions regarding frequency, likelihood, or rareness implicitly suggesting probability. Such testimony exceeds the limits of science and is therefore inappropriate.

Error Type 1: The examiner stated or implied that the evidentiary hair could be associated with a specific individual to the exclusion of all others. This type of testimony exceeds the limits of the science.

Error Type 2: The examiner assigned to the positive association a statistical weight or probability or provided a likelihood that the questioned hair originated from a particular source, or an opinion as to the likelihood or rareness of the positive association that could lead the jury to believe that valid statistical weight can be assigned to a microscopic hair association. This type of testimony exceeds the limits of the science.

Error Type 3: The examiner cites the number of cases or hair analyses worked in the lab and the number of samples from different individuals that could not be distinguished from one another as a predictive value to bolster the conclusion that a hair belongs to a specific individual. This type of testimony exceeds the limits of the science.

Appropriate: The examiner's testimony appropriately reflected the fact that hair comparison could not be used to make a positive identification, but that it could indicate, at the broad class level, that a contributor of a known sample could be included in a pool of people of unknown size, as a possible source of the hair evidence (without in any way giving probabilities, an opinion as to the likelihood or rareness of the positive association, or the size of the class) or that the contributor of a known sample could be excluded as a possible source of the hair evidence based on the known sample provided. An opinion as to the likelihood or rareness of a positive association may be appropriate in certain cases in which the examined hair samples display unusual or distinct characteristics, *e.g.*, repeated artificial treatments resulting in color variations along the length of the hair, hairs that have been crushed, broken, burned or damaged in some distinctive manner, or hairs that display specific characteristics associated with certain diseases such as pili annulati, monilethrix, or trichorrhexis nodosa.