SUPERIOR COURT OF THE DISTRICT OF COLUMBIA CRIMINAL DIVISION

UNITED STATES : Case No. 2016 CF1 002267

v. : Judge Judith Bartnoff

BENITO VALDEZ :

ORDER

The defense filed a motion seeking for the Court to preclude the government from presenting expert testimony in this case with regard to firearms examination and toolmarks. The government filed an opposition to the motion, and the defense filed a reply. The Court held a hearing on the motion on November 3, 2017, and the government subsequently filed a sur-reply. In the first instance, the defense asked that testimony regarding firearms examination and toolmarks be excluded, but if the testimony is permitted, the defense sought limitations on what the expert would be permitted to say.

At a hearing in this case on January 8, 2018, the Court indicated that it would deny the motion and would permit the testimony of the expert. The Court also discussed the scope of the proposed testimony. This Order is being entered to provide some further explanation of that ruling.

As an initial matter, the Court—in agreement with other state and federal courts that have considered the issue—does not find that the expert testimony should be excluded. Testimony about toolmark matching long has been permitted in this Court under the *Frye* standard, *see Frye* v. United States, 293 F.1013 (D.C. Cir. 1923) and Dyas v. United States, 376 A.2d 827 (D.C. 1977). The focus of the *Frye* test is whether the scientific or technical discipline generally is

accepted in the relevant scientific community. The defense argues that the admissibility of this type of expert testimony should be revisited because the Court of Appeals now has adopted the *Daubert* standard for determining the admissibility of expert testimony. *See Motorola*, *Inc. v. Murray*, 147 A.3d 751 (D.C. 2016 (*en banc*); *Daubert v. Merrell Dow Pharms.*, *Inc.* 509 U.S. 579 (1993); Rule 702 of the Federal Rules of Evidence. Under *Daubert*, the primary focus of the inquiry regarding the admissibility of expert testimony is the validity and reliability of the principles and methods on which the expert's opinion is based. ¹

The defense contests the reliability of firearms identification evidence based essentially on three reports: a 2008 report, *Ballistics Imaging*, by the National Research Council's Committee on Assessing the Feasibility, Accuracy, and Technical Capability of a National Ballistics Database; a 2009 Report, *Strengthening Forensic Science in the United States: A Path Forward*, by the National Research Council Committee on Identifying the Needs of the Forensic Science Community; and the 2016 Report by the President's Council of Advisors on Science and Technology, *Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods* ("PCAST Report").

Another judge of this Court, the Honorable Lynn Leibovitz, considered a challenge to the admissibility of expert testimony regarding ballistics and toolmark matching based on the 2008 and 2009 National Research Council reports in *United States v. Anderson* (and related cases), No.2009 CF1 20692 (Superior Court of the District of Columbia, Order entered September 13, 2010). Although the *Frye* standard was in effect at that time, the Court's analysis considered not

¹ In addition, the proponent of the testimony must show that the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue, that the testimony is based on sufficient facts or data, and that the expert reliably has applied the principles and methods to the facts of the case. *Motorola v. Murray*, 147 A. 3d at 751 (*quoting* Federal Rule of Evidence 702). The *Daubert* standard generally is considered to be broader than the *Frye* standard.

only the question of general acceptance, but also the validity and reliability of the underlying principles of the uniqueness and reproducibility of toolmarks, and the Court found it appropriate to rely on several cases that were decided under a *Daubert* analysis. This Court agrees with Judge Leibovitz's analysis and conclusion that although the 2008 and 2009 reports suggest that further research should be done on the uniqueness and reproducibility of firearms- related toolmarks, those reports do not undermine the basic admissibility of firearms toolmark evidence.

In its submission in this case, the government has provided additional information to the Court about research that has been done since publication of the 2008 and 2009 reports, including three- dimensional imaging studies, which provides further support for the validity and reliability of the identification of firearms by toolmark matching. The Court recognizes that the PCAST Report also questioned the use of toolmarks in identifying firearms, but the Court does not find that criticism persuasive, for the reasons set forth in the government's extensive filings, including the Declaration and Supplemental Declaration of Todd J. Weller. The PCAST Report did not address firearms identification evidence in any detail, but it appears to have ignored a substantial number of peer reviewed studies that confirm the basic validity and reliability of firearms identification by analysis and matching of toolmarks. The defense request for expert testimony on firearms and toolmarks to be excluded therefore will be denied. ²

The remaining question is what the government's firearms expert should be permitted to say, particularly with regard to the certainty of any conclusions regarding ballistics matching or identification. Recent decisions by the District of Columbia Court of Appeals have addressed that issue and have determined that a firearms and toolmark expert may not present an

² The defense of course may cross examine the government's firearms expert with regard to how the particular firearms testing was conducted in this case. The Court understands that the defense did not have the ballistics evidence tested by its own expert, although it did have the opportunity to do so.

unqualified opinion or testify with "absolute" or "100 per cent" certainty that based on ballistic pattern comparison matching, a shot was filed from a particular firearm to the exclusion of all other firearms. *See Gardner v. United States*, 140 A.3d 1172, 1183 (D.C. 2016). The government has confirmed in this case that its expert will not be stating an unqualified opinion, nor will he be testifying to any identification with absolute certainty or claiming that his conclusions are a "scientific certainty."

The government does intend for its expert to testify consistently with the current FBI Approved Standards for Scientific Testimony and Report Language for the Firearms/Toolmarks Discipline ("ASSTR"). In accordance with the ASSTR, the government's firearms expert is expected to testify that in his opinion the microscopic marks are in sufficient agreement to support a conclusion that they originated from the same individual source. He further would explain that the microscopic marks exceed the best agreement between toolmarks known to have been produced by different tools and consistent with the agreement demonstrated by toolmarks known to have been produced by the same tool. Although on that basis, he would testify to an identification, the government's expert would not express that opinion in terms of absolute certainty or a reasonable degree of scientific certainty, nor would he state or imply that the identification was being made to the exclusion of all other existing firearms in the world.

The defense is asking the Court for additional limitations on the firearms expert's testimony. The defense proposes that the expert only be permitted to describe the similarities he finds between the various pieces of ballistics evidence and to state (apparently without using the terms "match" or "identification") that he "cannot exclude" the possibility that certain bullets or casings were ejected from the same firearm. The defense also proposes that the expert be required to state any opinion in terms of the error rate found in a single non-peer reviewed study

that is cited in the PCAST Report. Those limitations far exceed the recent rulings of the Court of

Appeals with regard to the appropriate scope of expert opinion testimony regarding toolmark

identification, and the Court does not find those limitations to be warranted under *Daubert*. The

Court therefore will not adopt them.

The Court will permit the government's expert to testify in accordance with the ASSTR

and consistent with the Court of Appeals decision in *Gardner*. The expert may state an opinion

that bullets and/or casings were fired from the same firearm and explain the bases for that

opinion, but he may not give an unqualified opinion or testify with absolute or 100 percent

certainty that the bullet or casing is identified to one firearm, to the exclusion of all other

firearms. He also may not state an opinion in terms of "scientific certainty." Based on the

government's response to the defendant's motion and the representations of government counsel

at the hearing on the motion, it is the Court's understanding that the government's expert will be

stating an opinion that complies fully with the principles articulated by the Court of Appeals.

Based on the foregoing and the entire record, it therefore is by the Court this 30^{th} day of

January 2018

ORDERED that the motion to exclude firearm and toolmark testimony be and it hereby

is **DENIED**.

Judge Judith Bartnoff

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Signed in Chambers

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