

COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, ss.

**SUPERIOR COURT
SUCR2014-10417
SUCR2015-10384**

COMMONWEALTH

vs.

AARON HERNANDEZ

**MEMORANDUM OF DECISION AND ORDER ON
DEFENDANT'S MOTION IN LIMINE
TO EXCLUDE ANY TESTIMONY ON FIREARMS ANALYSIS**

On May 15, 2014, a Suffolk County grand jury indicted the defendant, Aaron Hernandez, for two counts of first degree murder in violation of G.L. c. 265, § 1, three counts of armed assault with intent to murder in violation of G.L. c. 265, § 18(b), assault and battery by means of a dangerous weapon in violation of G.L. c. 265, § 15A(b), and carrying a firearm without a license in violation of G.L. c. 269, § 10(a). Hernandez is charged with the July 16, 2012 murders of Daniel de Abreu and Safiro Furtado during a drive-by shooting in the South End section of Boston, Massachusetts. A third individual, Aquilino Freire, suffered a non-life threatening gunshot wound to his arm. Trial is scheduled to begin on February 13, 2017. The Commonwealth intends to offer ballistics evidence recovered from the crime scene and evidence or expert testimony suggesting that Hernandez used a particular Smith & Wesson .38 caliber special revolver, which the Massachusetts State Police subsequently recovered, to kill Abreu and Furtado and wound Freire.

Now before this Court is Hernandez's Motion in Limine to: "1) Exclude Any Testimony

Filed
12/21/16

on Firearms Analysis, 2) Exclude Expert Testimony Proffered Within ‘A Reasonable Degree of Ballistic or Any Other Forensic Discipline Certainty’ and/or 3) Report the Questions of Law Raised . . . to the Appeals Court Pursuant to Rule 34 of the Massachusetts Rules of Criminal Procedure.” More specifically, Hernandez makes the following six requests in his Motion:

1. That the court exclude any comparative firearms analysis from presentation before the jury;
2. That the Court exclude any expert testimony, including firearms analysis testimony, from presentation before the jury unless experts can opine within a “reasonable degree of scientific or forensic discipline certainty”;
3. That the Court report the questions of firearm analysis/reasonable degree of certainty to the Appeals Court with a request for a full review by the SJC, pursuant to Rule 34 of the Massachusetts Rules of Criminal Procedure;
4. That the Court require that all quality management system documents, internal validation studies, or independent black box studies of generic firearm analysis contracted by the Forensic Division, Firearm Analysis Unit/Crime Lab Unit of the Boston Police Department be both given to the Defendant and published online for other scientists to review;
5. Once the Commonwealth has turned over any alleged independent firearms validation studies under number 4 above, that the Court require the Commonwealth to prove the validity of any firearms analysis and studies in this case in a Daubert hearing using independent black box studies; and
6. That the Court allow this motion to be made both under State due process requirements and to federalize same under federal due process or other constitutional requirements.

Defendant’s Reply Memorandum at 1-2. The Commonwealth filed a written opposition to Hernandez’s Motion, and Hernandez filed a reply memorandum. The parties requested that this Court decide the Motion on the papers. For the reasons set forth below, Hernandez’s Motion is **DENIED.**

Hernandez’s Motion is primarily based on a September, 2016 report by the President’s

Council of Advisors on Science and Technology (PCAST), entitled, “Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods.” See Executive Office of the President, President’s Council of Advisors on Science and Technology, Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods (Sept. 2016), https://www.whitehouse.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf (PCAST Report). The PCAST Report, among other things, reviews the scientific validity of forensic feature comparison methods, including firearms toolmark analysis, and makes recommendations to courts and Federal authorities regarding further steps to “strengthen forensic science and promote its more rigorous use in the courtroom.” PCAST Report at 2. The PCAST Report specifically states:

PCAST finds that firearms analysis currently falls short of the criteria for foundational validity, because there is only a single appropriately designed study to measure validity and estimate reliability. The scientific criteria for foundational validity require much more than one such study, to demonstrate reproducibility.

Whether firearms analysis should be deemed admissible based on current evidence is a decision that belongs to the courts.

If firearms analysis is allowed in court, the scientific criteria for validity as applied should be understood to require clearly reporting the error rates seen in appropriately designed black-box studies (estimated at 1 in 66, with a 95 percent confidence limit of 1 in 46, in the one such study to date).

PCAST Report at 12, 112 (emphasis added). The conclusions of the PCAST Report are apparently subject to reconsideration; the co-chair of PCAST, Eric Lander, recently invited the National District Attorneys Association to submit additional scientific reports or literature to PCAST by December 14, 2016. Lander indicated that PCAST plans to review the findings of the PCAST Report in light of any additional relevant information.

“Forensic ballistics or firearms identification ‘is the analysis of bullet and cartridge case evidence and the use of that evidence to link specimens to each other and to particular weapons.’” Commonwealth v. Heang, 458 Mass. 827, 836 (2011), quoting National Research Council, *Ballistic Imaging* 15 (2008). For more than a century, forensic ballistics evidence has been recognized as admissible in Massachusetts courts. See, e.g., Commonwealth v. Barbosa, 457 Mass. 773, 780 (2010) (noting that Commonwealth’s ballistics expert testified to his opinion that seven cartridge casings found at scene of shootings were fired from nine millimeter Bryco semiautomatic pistol recovered from a catch basin, and that this firearm was in working condition); Commonwealth v. Best, 180 Mass. 492, 495- 496 (1902) (recognizing that expert was allowed to testify that bullets were marked by rust in the same way that they would have been if they had been fired through a rifle found at a farm). In Commonwealth v. Heang, 458 Mass. 827, 836-837 (2011), the Supreme Judicial Court considered the admissibility of forensic ballistics or firearms identification evidence in light of “significant legal and scientific scrutiny” about the accuracy and reliability of such evidence. The Supreme Judicial Court ultimately concluded that, “where defense counsel is furnished in discovery with the documentation needed to prepare an effective cross-examination, where a jury are provided with the necessary background regarding the theory and methodology of forensic ballistics, and where an opinion matching a particular firearm to recovered projectiles or cartridge casings is limited to a ‘reasonable degree of ballistic certainty,’ a jury will be assisted in reaching a verdict by having the benefit of the opinion, as well as the information needed to evaluate the limitations of such an opinion and the weight it deserves.” Commonwealth v. Heang, 458 Mass. at 850.

After a careful review of the materials submitted by the parties, after hearing, and for

generally the reasons stated on pages four through seven of the Commonwealth's written opposition, this Court concludes that there is no basis for the Court to revisit the Supreme Judicial Court's decision in Heang; accordingly, Hernandez's Motion must be denied. In this case, there is no basis to disturb settled Massachusetts law permitting a qualified firearms expert to offer opinion evidence under Mass. G. Evid. § 702 (2016), which states:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if

- (a) 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;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

While the PCAST Report echos various concerns about the accuracy and reliability of forensic ballistics evidence that the National Research Council (NRC) articulated in 2008 and 2009 and that the Supreme Judicial Court reviewed in Heang, the PCAST Report does not significantly alter the findings and conclusions of the NRC reports. See Commonwealth v. Legore, SUCR2015-10363, slip op. at 3 (Mass. Super. Ct. Nov. 17, 2016) (Locke, J.) (permitting Commonwealth to present expert testimony regarding forensic ballistics evidence and rejecting challenge to such evidence based on PCAST Report). At least one other court recently reached a similar conclusion and also rejected a challenge to the reliability of such evidence based on the PCAST Report. See United States v. Chester, 13CR00774, slip op. at 2 (N.D. Ill. Oct. 7, 2016) (Tharp, J.) (concluding that PCAST report does not undermine general reliability of firearms

toolmark analysis or require exclusion of proffered opinions in case and noting that questions about strength of inferences to be drawn from analysis of examiners presented by government may be addressed on cross-examination). Although the PCAST Report does not affect the admissibility of forensic ballistics evidence in this case, Hernandez may use it as fodder for cross-examination of certain witnesses at trial. In addition, this Court declines to report any questions related to this issue to the Appeals Court pursuant to Mass. R. Crim. P. 34. See Commonwealth v. Eagleton, 402 Mass. 199, 208 (1988) (acknowledging that whether to report questions of law rests within discretion of trial judge).

ORDER

For the foregoing reasons, it is hereby **ORDERED** that Defendant Aaron Hernandez's Motion in Limine to: "1) Exclude Any Testimony on Firearms Analysis, 2) Exclude Expert Testimony Proffered Within 'A Reasonable Degree of Ballistic or Any Other Forensic Discipline Certainty' and/or 3) Report the Question of Law Raised . . . to the Appeals Court Pursuant to Rule 34 of the Massachusetts Rules of Criminal Procedure" is **DENIED**. The Commonwealth shall be permitted to present expert testimony regarding forensic ballistics evidence, subject to the conditions and limitations outlined in Commonwealth v. Heang, 458 Mass. 827, 836-850 (2011), and further subject to the requirement that the Commonwealth shall elicit testimony regarding known error rates based on the studies identified in the PCAST Report. Moreover, nothing in this decision shall limit Hernandez's counsel from cross-examining any witness based on the findings and content of the PCAST Report.


Justice of the Superior Court

Dated: December 21, 2016