IN THE CIRCUIT COURT FOR PRINCE GEORGE'S COUNTY, MARYLAND

STATE OF MARYLAND	*	
v.	*	**CT121375X**
KOBINA ABRUQUAH	*	

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STATE'S MOTION TO EXCLUDE TESTIMONY OF WILLIAM TOBIN AND CLIFFORD SPIEGELMAN

COMES NOW, the State of Maryland, by and through Angela Alsobrooks, State's Attorney for Prince George's County and Jonathon R. Church, Assistant State's Attorney and submits this Response to Defendant's Motion to Exclude Testimony of William Tobin and Clifford Spiegelman.

As more fully stated below, the State respectfully submits that the testimony sought by the Defendant of each of these "expert witnesses" before a jury are not permitted by law and should therefore be excluded.

Introduction

On November 27, 2013 the defense filed notice of its intent to call two "expert witnesses for the purposes of addressing the scientific foundations of firearms and toolmarks identification practice." The State has received both of the "experts" CV's and neither works in the field of firearms and toolmarks identification and neither conducted any independent testing in this case. Mr. Tobin works, or at least at one time, worked in the field of metallurgy and Mr. Spiegelman is a statistician.

After receiving the above mentioned notice, the State contacted the Defense asking for what if any testing or analysis these "experts" had conducted and what their opinions would be. The Defense responded as follows:

> They have not done any independent testing and there are no reports as of yet. They are going to testify generally as to firearms/toolmark identification and testing procedures, and how it is impossible to conclusively "match" bullets to a particular gun, but rather that the most conclusive determination is that one is consistent with the other.

Based on this response, the "expert's" qualifications (or lack thereof), and Rule 5-702, the State submits that neither witness may be permitted to testify at trial.

The testimony being sought is prohibited by Rule 5-702 and *Frye/Reed*

The Defense is seeking to have "expert" witnesses refute the validity of firearms and tool mark identification. What the Defense has noted appears to be more of a *Frye/Reed* challenge, **a matter of law**, rather than expert testimony supported by a factual basis (and there is concededly

no factual basis for their opinion) that would assist the trier of fact in determining a fact at issue. The Defense has not requested, and has even conceded, that they are not seeking a *Frye/Reed* hearing.

Even had the Defense challenged under *Frye/Reed*, the courts have long held that a trial court may take judicial notice of firearms and tool mark identification. (See *Fleming v. State*, 194 Md. App. 76, for an extensive discussion on how every jurisdiction in the United States of America, including Maryland and the Federal District Court of Maryland, has found firearms and tool mark identification to be admissible.)

Furthermore, since expert testimony in a particular field such as firearms and toolmark identification is a **matter of law** for the trial court's determination, the Defense may not seek to have the jury, by way of its "expert" witnesses, make this determination by presenting "expert" witnesses who do not ascribe to firearms and toolmark identification which is "generally accepted as reliable within the expert's [Mr. Scott McVeigh] particular field." *Giddens v. State*, 148 Md. App. 407, 412-13 (2002). In fact, the mere fact that these two witnesses disagree with the generally accepted practice within the relevant scientific community puts them in a position where *their opinions are not generally accepted by the relevant scientific community* and are therefore barred from admission.

It should be noted that for the past five or more years William Tobin (a metallurgist) and Clifford Spiegelman (a statistician) have been launching *Frye/Reed* attacks in both state and federal courts without success. In fact, the opinions expressed by Tobin and Spiegelman have been rejected in each and every case. (source http://www.swggun.org/swg/index.php?option=com_content&view=article&id=42:case-citations&catid=9:ark&Itemid=19). In fact, both of these expert witnesses launched a similar *Frye/Reed* attack here in Prince George's County in the case of *State v. Whittingham*, CT081682X. In that case, the Honorable Judge Nicholas Rattal rejected Tobin's and Spiegelman's challenge to the scientific process of firearms and toolmark identification and permitted the state's expert witness in that case, firearms examiner Terry Eaton, to testify about his conclusions to a "reasonable degree of scientific certainty."

It appears that after so many failures at *Frye/Reed* challenges in both state and federal courts, Tobin and Spiegelman are now seeking to circumvent the trial court's ability to rule as a matter of law and, instead, attempt to present the issue to the jury by testifying as "experts" at trial. There is a distinct difference between testimony that will assist the trier of fact verses the reliability of a scientific technique or process. As the Honorable Judge Moylan opined:

> *The question of the reliability of a scientific technique or process is unlike the question,* for example, *of the helpfulness* of particular expert testimony *to the trier of facts in a specific case. The answer to the question about the reliability of a scientific technique or process does not vary according to the circumstances of each case.*

Fitzgerald v. State, 153 Md. App. 601, 648 – 49 (2003). What the Defense is seeking to accomplish is simply not permitted by law.

Neither witness is an expert in the field of firearms and toolmark identification, the relevant scientific community

A. Mr. William Tobin

After hearing his expert testimony under oath, Judge Richard E. Welch of the Superior Court of Massachusetts had this to say of the Defense expert William A. Tobin:

> "His testimony smacks of the partisan crusader rather than a dispassionate scientist. His lack of credibility is underscored by his inability to directly answer a question, his insistence on giving a pre-planned recitation and is constant self-promotion. This judge can think of no expert witness he has found less credible."

Commonwealth v. Daye, No. 11238-11246, 2005 WL 1971027 (Aug. 3, 2005, Mass. Super.) In a footnote included in the original citation, Judge Welch went on to note a particular instance of "mistaken" testimony under oath regarding disclosure of evidence and the ease at which his personal bias affected his "expert" opinion.

What underscores this opinion even more is that Mr. Tobin was testifying regarding Comparative Lead Bullet Analysis (CBLA) arguably his strongest field of expertise, in which he at least conducted a scientific study. In the case at bar, Mr. Tobin is opining based on general tool mark knowledge with admittedly limited experience and without the benefit of any formal training whatsoever.

Additionally, Mr. Tobin is not qualified to state an opinion as to the creation of a mathematical expression of certainty in the field of ballistics. He is not a statistician and does not understand how to apply statistics to the field of firearms examination. Finally, he has not conducted any studies on applying statistical formulas to the field of firearms examinations. Any conclusion he may give in this regard can only be seen as prohibited *ipse dixit* opinion. *See, e.g., Bohnert v. State,* 312 Md. 266 (1988) (holding that expert opinion must be based on scientific facts proven or assumed, as opposed to conjecture. The opinion itself cannot provide the foundation for the opinion.) Since Mr. Tobin does not understand the statistical probability and more importantly how to apply its principals he cannot express any opinion as to its viability, reliability or otherwise.

B. Mr. Clifford Spiegelman - Why it's the Relevant Scientific Community that Matters

Statistical analysis – which relies on fixed points – is most properly applied to analytical sciences. One's such as DNA. As the NAS suggested, TA/FM is NOT an analytic science on the same footing as DNA analysis and does not lend itself to statistical analysis because there are no fixed knowns *a priori.* In other words, without the set parameters present in mathematical and chemical analytic disciplines, it is only illusorily possible to create a "statistical probability" of a match. See, e.g. *Forensic Science Communications*, October 1999, a peer-reviewed quarterly journal published by FBI Laboratory personnel at http://www.fbi.gov./programs/lab/fsc/current/index.htm ("none of the forensic science disciplines can that deal with comparisons based on unique occurrences, or clinical judgments

can establish the degree of confidence statistically with respect to an individual result."). *See, also,* Moenssens, A., Meeting the Daubert Challenge to Handwriting Evidence – Preparing for a Daubert Hearing, abstract from presentation at Second Annual Symposium on the Forensic Examination of Questioned Documents at Albany, N.Y., June 18, 1999 (the scientific product is not subject to routine measurements, which could later be summarized and compared to the ideal.)

A statistician, therefore, who wishes to determine whether it is statistically possible to demonstrate individualization – the thrust of defendant's unreliability claim – must understand the random nature of tool marks, the methodology of finding and matching marks. As the NAS Reports states "understanding situations that may pose particular challenges for associating two images of evidence requires some knowledge of situations that are generally known to be complex in the field." NAS Report p. 81.

Furthermore, a demand that there be a certain number of matching marks completely ignores the fundamental understanding of what makes tool marks unique since 1 mark, if sufficiently out of the ordinary from the manufacturing process could by itself produce a match. Contrast that to DNA which occurs naturally and in which the alleles are fixed and consistent, it becomes simply a matter of side by side comparison, taken in combination with genome frequency and population characteristics which allow the extrapolation of statistical individualization.

As stated above, without such fixed reference points, meaningful statistical analysis is an illusory academic goal. As a case in point, Defendant's statistician-affiant Spiegelman, authored the section in the 2004 National Academies of Science, Board on Chemical Sciences and Technology study regarding comparative lead bullet analysis entitled *Forensic Analysis: Weighing Bullet Lead Evidence* in which, ironically enough, he concluded that the statistics proved that it was reliable![1] Miraculously, two years later, it was thrown out of court and he filed additional reports that it was not statistically reliable! Given his ability to flip-flop so easily, and considering his lack of expertise in tool mark examination – much like his lack of expertise in the chemical and elemental compositions of bullet lead – Mr. Spiegelman's opinion regarding the necessity of statistics in order to prove individualization should be dealt with in the same fashion that Courts have dealt with other unqualified attempts to comment on firearms methodology and practices, it should be afforded little or no weight by this Court when

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[1] Despite the variations in manufacturing processes that make it difficult to determine whether bullets come from the same compositionally indistinguishable volume of lead (CIVL), CABL analysis can have value in some court cases. **Finding: The committee found that CABL is sufficiently reliable to support testimony that bullets from the same CIVL are more likely to be analytically indistinguishable than bullets from different CIVLs. An examiner may also testify that having CABL evidence that two bullets are analytically indistinguishable increases the probability that two bullets came from the same CIVL, versus no evidence of match status. Recommendation: Interpretation and testimony of examiners should be limited as described above, and assessed regularly.** *Id.* at p. 6, Legal Interpretations. It should be noted that Mr. Spiegelman, along with Karen Kafadar (another of the 2009 NAS Report Committee Members) are the two who authored Appendix K – Statistical Analysis of Bullet Lead Data to this report which forms the basis of this conclusion.

determining the issue of whether general acceptance is being questioned and certainly should not be permitted by way of testimony before a jury.

Conclusion

Based on the aforegoing, and any additional argument that might be presented at a hearing on the matter, the State respectfully requests that William Tobin and Clifford Spiegelman be excluded from testifying at trial on the above captioned matter.

Respectfully submitted,

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Jonathon R. Church

Assistant State's Attorney

CERTIFICATE OF SERVICE

I, Jonathon R. Church, Assistant State's Attorney hereby certify that on this 9th day of December, 2013, I hand delivered the foregoing State's Motion to Exclude the Testimony of William Tobin and Clifford Spiegelman to Elizabeth Cawood, Esq. Counsel for the Defendant.

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Jonathon R. Church