V I R G I N I A:

IN THE CIRCUIT COURT FOR THE CITY OF COLONIAL HEIGHTS

COMMONWEALTH OF VIRGINIA,

v. **Case Nos. CR11-465-01,-02,-03 & -04 and CR11-494-01,-02,-03, & -04**

MATTHEW FRANKLIN BRADY

ORDER FOR ADMISSIBILTY OF DNA EVIDENCE

CAME ON July 26, 2013, the parties to consider the hearing for the admissibility of the DNA evidence and certificate of analysis in the Matthew Franklin Brady case. The Commonwealth was represented by Warren Von Schuch, Senior Special Assistant Commonwealth and A. Gray Collins, III, Deputy Commonwealth Attorney, while the defendant was represented by Stephanie Miller, lead counsel from the Capital Defender's Office, Joseph Vigneri, Capital Defender, Jessica Bulos, Assistant Capital Defender, and Jon Thornbrugh, local counsel for the defendant. The defendant Matthew Franklin Brady was present during the five day hearing.

After reading the opening statements, hearing five days of testimony and hearing oral arguments, which is hereby incorporated by reference, the Court FINDS and states as follows:

The defense's motion to submit written argument is denied, as it would not assist the Court in the determination of the issues before it. The Court, therefore, is prepared, based upon the evidence it has heard and the arguments of counsel, to offer and to render its opinion.

Context is important: this is an admissibility hearing, not a hearing judging the weight of the evidence; and we have arrived at this point after a long process of legal development that

spans at least three quarters of a century.

The standard that the Court starts with is set forth in *Billips v. Commonwealth*, 274 Va. 805, 810, 652 S.E.2d 99, 102 (2007), where the Virginia Supreme Court stated that the burden of making a prima facie showing regarding the foundation of such evidence rests upon the proponent of the evidence. In this case, this means that the Commonwealth must initially make a prima facie case of the reliability of the scientific method offered.

The background for the admissibility of expert testimony dates back to the 1923 so-called "Frye test," wherein the Court stated that the trial court must be convinced not only of the reliability of the scientific evidence, but also of its general acceptance within the scientific community. *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923).

Over the years, *Frye* eroded. In *Ellis v. Int'l Playtex, Inc.*, 745 F.2d 292 (4th Cir. 1984), the Fourth Circuit noted that the *Frye* rule had come under increasing attack because of the importance it placed on the judge's subjective ability to "count heads" among experts in the scientific community. *Id.* at 304.

Critics and courts that have rejected *Frye* have argued that the acceptability of scientific data should be debated by experts in front of the jury in an era when scientific data is playing an increasingly important role at trial. *Id.* at 304. Thus, *Frye* began to erode because there was no reason not to let the jury see and evaluate the same data that experts were relying on to reach their conclusions.

In Virginia, in *Walrod v. Matthews*, 210 Va. 382, 388, 171 S.E.2d 180, 185 (1969), our Supreme Court observed that "[i]n matters of this kind which are not of common knowledge we must accept the opinion of experts . . . Evidence of this kind is competent, unless it is palpably absurd, and it is not made incompetent by the fact that other experts may have reached another conclusion. Always it should be scrutinized with care, but the manner in which it is weighed has nothing do with its

admissibility." *Id.* at 389, 171 S.E.2d at 185-86. The matter before this Court is not one of common knowledge.

Two decades later, the Virginia Supreme Court in *Spencer v. Commonwealth*, 240 Va. 78, 393 S.E.2d 609 (1990) put a finer point on *Walrod,* and elaborated that "[w]ide discretion must be vested in the trial court to determine, when unfamiliar scientific evidence is offered, whether the evidence is so inherently unreliable that a lay jury must be shielded from it, or whether it is of such character that the jury may safely be left to determine credibility for itself." *Id.* at 98, 393 S.E.2d at 621.

Thus, the Court reads together *Billips*, *Walrod*, and *Spencer*.

The Commonwealth must make a prima facie case of the reliability of the scientific method offered. In considering and asking itself what that prima facie case is, the Court does not engage in a *Frye* test. Rather, it starts with the proposition stated in *Walrod,* that evidence of this kind is competent, unless it is palpably absurd; and elaborated upon in *Spencer,* that the test is whether evidence is so inherently unreliable that a lay jury must be shielded from it.

Two principles emerge, each of them long-standing traditions in Virginia jurisprudence. One is the principle of judicial restraint, that yields to the trier of fact in determining matters, to the greatest extent possible; the second, a principle of trust in our triers of fact, and in particular, a principle of trust in our system of trial by jury.

In determining the *Billips* threshold of evaluating a prima facie case, the Court is guided, but not bound by, the factors in *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993), to which case both Counsel have referred.

The Court observes the following in examining the four *Daubert* factors:

The first is whether the science could and had been tested. *Id.* at 593. Here, much is made of the inability to thoroughly test the TrueAllele protocol, because its source code is unknown.

However, the Court places great emphasis on the observation in *Commonwealth v. Foley*, 38 A.3d 882, 2012 Pa. Super. 31 (Pa. Super. Ct. 2012) that validation studies are the best tests of the reliability of source codes. In this case, validation studies have been performed with positive results. They have not shown that the TrueAllele system is junk science; they have shown, in fact, that it is reliable.

The second factor in *Daubert* is whether the protocol has been subjected to peer review and publication. *Daubert*, 509 U.S. at 593. There have been a number of peer-reviewed articles and peer-reviewed publications regarding TrueAllele. Indeed, the Division of Forensic Science has its own validation study that is, by its nature, a peer review of the TrueAllele system. In the Court's opinion, then, TrueAllele has been subjected to peer review and has had several peer-reviewed published studies.

The third factor in *Daubert* is the error rate and the standards of controlling the operation of the technique. *Id.* at 594. Certainly there are rates of error here, as might be expected with any scientific method of this sort; but there is no evidence that these rates of error are unacceptable, or compromise the validity of TrueAllele. The Division of Forensic Science clearly found them acceptable.

TrueAllele, additionally, has its own standards for controlling the operation of the technique. The Court notes the rigorous training with which Ms. Greenspoon and her staff at the Division of Forensic Science were provided, and the continuing support, as well. Further, TrueAllele utilizes widely accepted standards: MCMC, Bayesian theory, MATLAB and probabilistic modeling.

Finally, the fourth *Daubert* factor is the question of general acceptance, *Id.* at 594, though this factor is not controlling. There was, for example, no acceptance, much less general acceptance of the science approved in *Spencer* when it was decided.

However, general acceptance is a factor that is relevant in this case. The Court notes that TrueAllele has been accepted by NIST, and Dr. Perlin has conducted extensive lectures and conferences concerning it. The Court infers that he has done so for a number of years, and that he continues to do so.

It is also important to note that Virginia's Division of Forensic Science described TrueAllele as a valuable tool that has been held admissible in courts in Virginia, in other states in the United States, and in the United Kingdom. Additionally, Dr. Perlin has testified in five circuit courts in Virginia.

The fact that Dr. Perlin has previously been accepted as an expert in courts in Virginia, and that his testimony has been admissible is also of some importance, though neither controlling nor determinative, because its admissibility was not contested in those cases.

TrueAllele has also been accepted by New York State, and was used significantly in the September 11th bombing investigation. TrueAllele has certainly found greater acceptance than the analytical techniques utilized in *Spencer* enjoyed at the time of their acceptance.

In looking at the *Daubert* factors, then, and considering them in applying the law in *Walrod* and *Spencer*, the Court's opinion is that the Commonwealth has, pursuant to *Billips*, made a prima facie case of the reliability of the scientific method offered. The Court further finds that evidence offered under TrueAllele is not palpably absurd, and it is not so inherently unreliable that a lay jury must be shielded from it.

TrueAllele is , indeed, of such character that a jury may safely be left to consider all scientific evidence before it at the time of trial, and consistent with the instructions which will be given by the Court, the jury may be safely left to determine credibility for itself.

After reviewing the facts and analysis above, IT IS THEREFORE ADJUDGED, ORDERED AND DECREED the following:

1. The Commonwealth has made a prima facie case of the reliability of the TrueAllele scientific method offered.
2. The evidence offered under TrueAllele is not palpably absurd,
3. The evidence is not so inherently unreliable that a lay jury must be shielded from it.
4. The evidence is of such character that a jury may safely be left to consider all scientific evidence before it at the time of trial, and that consistent with the instructions, which will be given by the Court, the jury may be safely left to determine credibility for itself.

It is further ORDERED that the DNA evidence, including the certificate of analysis by the TrueAllele system, is hereby admissible at all further hearings and trials.

ENTERED: 12/17/13

JUDGE

We ask for this:

William Bray, Esquire
Commonwealth's Attorney for the City of Colonial Heights
550 Boulevard,
Colonial Heights, VA 23834
(804) 520-9293
(804) 520-9229 (fax)

A COPY, TESTE:
STACY L. STAFFORD, CLERK
COLONIAL HEIGHTS CIRCUIT COURT
BY: Deputy Clerk

William Davenport, Esquire
Commonwealth's Attorney for Chesterfield County
P.O. Box 25
Chesterfield, VA 23832
(804) 748-1221
(804) 717-6277 (fax)

SEEN AND OBJECTED TO:

Joseph Vigneri, Esquire
Capital Defender
Capital Defender's Office
1602 Rolling Hills Drive, Suite 212
Henrico, VA 23229
(804) 662-7166
(804) 662-7172 (fax)

Stephanie Miller, Esquire
Senior Capital Defender
Capital Defender's Office
1602 Rolling Hills Drive, Suite 212
Henrico, VA 23229
(804) 662-7166
(804) 662-7172 (fax)

Jon Thornbrugh, Esquire
Attorney for the Defendant
10303 Memory Lane, Suite 102C
Chesterfield, VA 23832
(804) 751-0751
(804) 751-1824 (fax)