

STATE OF MISSOURI)
) SS
CITY OF ST. LOUIS)

IN THE CIRCUIT COURT OF THE CITY OF ST. LOUIS
STATE OF MISSOURI

STATE OF MISSOURI,)
Plaintiff,)
) Cause Number 22911-01758B-01
v.)
) Division: 10
REGINALD CLEMONS,)
Defendant.)

**State's Response to Defendant's
Motion to Compel Disclosure of a Personal Copy
of the TrueAllele Source Code**

The State of Missouri, by and through undersigned counsel, hereby requests this Court deny the Defendant's Motion to Compel Disclosure of a personal copy of the TrueAllele Source Code and in support thereof states the following:

1. Clemons states in his Motion to Compel that the Missouri State Highway Patrol (MSHP) Crime Lab analyzed items connected to the 1991 underlying crimes which resulted in unsuccessful or inconclusive outcomes.
2. Clemons is mistaken. When the MSHP Crime Lab conducted the examinations in 2011 as part of the habeas corpus proceedings. That analysis did, in fact, inculcate the Defendant. Subsequent to that analysis, the MSHP standards changed and rendered the former results inconclusive.
3. Clemons then points out in his Motion that "Six years later ... the State forwarded DNA profile data for two of the original seven samples to

Cybergenetics” as if to imply the State had been sitting on this information and/or opportunity. As this Court knows, the Circuit Attorney’s Office made the decision to re-try Clemons for the capital crimes for which he had been previously been convicted. The Attorney General’s Office took the case over due to a lack of resources at the Circuit Attorney’s Office and had this case for mere months when the decision was made to pursue this avenue of evidentiary analysis and has provided Clemons with results obtained immediately following receipt of them.

**The Confrontation Clause Will Not Be Violated
If the Source Code Is Not Disclosed**

4. Clemons claims that the Confrontation Clause applies to forensic evidence, citing *Melendez-Diaz v. Massachusetts*, 557 U.S. 305 (2009). But *Melendez-Diaz* does not require this Court to grant Clemons' motion. *Melendez-Diaz* stands for the proposition that forensic evidence cannot be introduced in trial without the testimony of the expert who conducted the analysis. The State absolutely intends to present the TrueAllele forensic evidence through the testimony of the analyst.
5. While Clemons cites to *State v. Taylor*, 663 S.W.2d 235 (Mo. banc 1984) in his Motion to Compel, *Taylor* deals with the admissibility of evidence at trial. *Taylor* is, therefore, not applicable to this motion to compel. Further, to the extent that *Taylor* performs an analysis under a pre-2017 version of §490.065, it is no longer good law and should not be followed. See §490.065

(effective August 28, 2017); *see also Daubert v. Merrill Dow Pharmaceuticals*, 509 U.S. 579 (1993).

Missouri Rules 25.03, 25.04 and 25.10
Do Not Require Disclosure of the Source Code

6. Rule 25.03 requires production of certain items "within its possession or control." Rule 25.03. The State is not in possession of the TrueAllele source code. And the TrueAllele source code is not otherwise within the ambit of Rule 25.03.
7. Rule 25.04 provides that if a defendant makes a showing of "good cause," then a court shall order additional disclosure.
8. The TrueAllele source code is a trade secret. Cybergenetics does not produce personal copies of the source code to anyone outside the company. In fact, the source code has never been released. Personal copies of the source code are not distributed to employees of Cybergenetics, and copies are not provided to individuals, businesses, or government agencies that use or license the software. Declaration of Dr. Mark Perlin ("Perlin Dec"), ¶150 attached hereto as State's Exhibit 1.
9. Missouri Supreme Court Rule 25.04 states that the defense may make a written motion requesting disclosure of material and information not covered by Rule 25.03 upon a showing of "good cause." In such a case, then the court shall order the state to disclose to the defendant that material and information requested which is found by the court to be relevant and material to the defendant's case.

10. Rule 25.10 creates three categories of information which are never subject to disclosure. While Rule 25.10 does not list “trade secrets” as matters which *shall not* be subject to disclosure that does not mean that *everything else* is subject to disclosure. In fact, under the Rules, Clemons is required to show "good cause" before the Court may issue an order to compel discovery. In fact, this Court may consider many factors when determining if Clemons has demonstrated "good cause" and if Clemons' request is reasonable.
11. Release of a personal copy of the source code is not reasonable under Rule 25.04. Production of a personal copy of the source code would cause irreparable harm to the company, enabling competitors to easily copy the company's proprietary products and services. *Id.* at ¶55.
12. Moreover, transfer of the source code would not benefit Clemons. Clemons does not provide any explanation of why a personal copy of the source code would be useful to his proposed inquiry, or how a personal copy of the source code will provide answers to any of the questions posed by the defense. Neither Clemons nor any expert he has identified has argued that the software is defective or has errors that could be detected only if they receive a personal copy of the source code, which is 170,000 lines long. Neither defense counsel nor their identified expert even claim to have the skills, knowledge or training necessary to comprehend the source code.¹

¹ While the defense has not endorsed any experts, they did name a J. Thomas McClintock as the person they would have reviewing the DNA analysis during the

13. Most caselaw available that involves a discussion of Rule 25.10 deals with disclosure of confidential informants and work product information. However, a recent federal case raises similar issues as the present case. *U.S. v. Hoeffener*, 4:16-CR00374-JAR/PLC 2017WL 3676141 (Opinion of Magistrate Patricia L. Cohen).²
14. In *Hoeffener*, the defendant was seeking the source code (among other things) for a computer software program used to identify and investigate suspects engaged in the possession and distribution of child pornography. *Hoeffener* sought the source code under several theories and the Court denied the Motion to Compel on all grounds – pursuant to *Brady* and *Giglio*, as well as pursuant to Fed. R. Crim. Pro. 16(c)--the federal discovery rule.
15. The defendant in *Hoeffener* argued that the requested information was material to his defense and therefore, discoverable. *Id* at *10.
16. After a thorough analysis of “materiality” the Court found that a showing of materiality requires more than a “mere conclusory allegation” of the requested information’s materiality. *U.S. v. Krauth*, 769 F.2d 473, 476 (8th Cir. 1985). In particular, a defendant must show the pretrial disclosure of the requested information would “enable the defendant significantly to alter the quantum of proof in his favor.” *U.S. v. Ross*, 511 F.2d 757 763 (5th Cir. 1975). A defendant must show “case-specific facts which would demonstrate

course of their Motion to Continue argued on June 23, 2017. Ironically, Clemons has not yet provided any discovery to the State.

²The Defendant in *Hoeffener* can, but has not yet, appealed the magistrate's order and opinion to the district court.

the materiality of the information sought.” *U.S. v. Santiago*, 46 F.3d 885, 895 (8th Cir. 1995).

17. A protective order would not be sufficient to protect the interests of Cybergenetics in their proprietary interests in the TrueAllele technology. There is no real effective remedy in this case once a protective order is violated if this Court orders the release of a personal copy of the source code. Perlin Dec at ¶65.

**A Personal Copy of the Source Code is Not Necessary
to Show TrueAllele’s Reliability**

18. The code is written in MATLAB (for MATrix LABoratory) a high level mathematical language for programming and visualizing numerical algorithms made by the MathWorks. It is approximately 170,000 lines long. It was written by multiple programmers over two decades. The computer code is dense mathematical text. It is wholly unrealistic to expect that reading through TrueAllele source code would yield meaningful information. Perlin Dec at ¶¶42 and 45. Since having a personal copy of the source code would not aid Defendant, he cannot show the "good cause" necessary for this Court to issue an order under the Rules.

19. Materiality of evidence looks to the relationship between the proposition for which the evidence is offered and the issues in the case. McCormick on Evidence §541 (Edward W. Cleary, Lawyer’s Ed. 1984). The mere fact that testing equipment or computer-based analysis is used in a criminal case does

not demonstrate that the defense is entitled to examine the testing method or obtain the equipment's source code.

20. In order to demonstrate materiality of the source code, the Defendant must present some admissible evidence – and not simply hearsay statements or proffers by counsel – capable of supporting a finding that examination of a personal copy of the source code will provide evidence that is both relevant to and favorable to the defense.

21. TrueAllele's reliability was already demonstrated with the evidence in this case. The report and its supporting case packet described the system's sensitivity, specificity and reproducibility on the DNA evidence. Perlin Dec at ¶72.

22. The TrueAllele calculation is entirely objective: when it determines the genotypes for the contributors to the mixture evidence, the computer has no knowledge of the comparison genotypes. Genotype comparison and match statistic determination are only *after* genotypes have been computed. In this way, TrueAllele computing avoids human examination bias, and provides a fair match statistic. Perlin Dec at ¶25.

23. Scientists can evaluate the reliability of a computerized process even if they do not have a personal copy of the "source code" underlying that process. TrueAllele is proprietary software; it would not be possible to market TrueAllele if it were available for free. TrueAllele has been tested and

validated in peer-reviewed studies. *Commonwealth v. Foley*, 47 A.3d 882, 889 (Pa.Super.2012).

24. Computer analysis of uncertain data using probability modeling is the scientific norm. Perlin Dec at ¶27.
25. Over thirty validation studies have been conducted by Cybergenetics and other groups to establish the reliability of the TrueAllele method and software. Seven of these studies have been published in peer-reviewed scientific journals, for both laboratory-generated and casework DNA samples. Source code was not needed or used in any of these studies. Perlin Dec at ¶29.

Cybergenetics Has Offered to Allow Defendant to Review a Copy of the Source Code, and its Conditions are not Onerous or Unreasonable

26. Cybergenetics offers experts and attorneys the opportunity to review the TrueAllele process, examine results and ask questions. This review can be done in Cybergenetics' Pittsburgh office (a three and a half hour drive from Washington, D.C. or a direct one hour flight) or through a Skype meeting. Perlin Dec at ¶70.
27. Cybergenetics routinely explains the system, used by both prosecution and defense. This introduction to the TrueAllele method, the case data, and the application of the method to the data, is a logical first step in understanding how the system works. *Id.*
28. Cybergenetics offers commercial services for validating DNA mixture interpretation methods. Any party can provide DNA validation data and

obtain these services to assess TrueAllele reliability. Since TrueAllele is an objective process, and produces unbiased DNA identification results that do not “know” comparison genotypes during analysis it is easy for Cybergenetics to perform these studies and the source code is not needed for obtaining these services. Perlin Dec at ¶74.

29. Even if Defendant had shown the "good cause" necessary to compel disclosure, which he has not, then Defendant would still not be entitled to a personal copy of the source code because Cybergenetics has offered to make a copy available for Defendant's review.

30. Making a copy available for Defendant's review is a procedure that the Missouri Supreme Court has endorsed in its Rules. Rule 25.07(b). Further, such a procedure likely satisfies a State's obligation to disclose evidence under Due Process Clause given that the Federal Rules of Criminal Procedure provide for the same procedure. Fed. R. Crim. Pro. 16(a)(1)(E)

Conclusion

This Court should deny the Defendant’s Motion to Compel Disclosure of the TrueAllele source code as the Defendant’s request for a personal copy of the source code is not reasonable and the Defendant cannot make a requisite showing that the source code is relevant and material to the Defendant’s case. The Defendant has access to the testing free of charge and has chosen to not avail himself of it. The reliability of TrueAllele can be and has been validated without production of a

personal copy of the source code. Denial of disclosure of the source code has been upheld in appellate courts in other jurisdictions.

Respectfully submitted,

JOSHUA D. HAWLEY
Attorney General

/s/ Gregory M. Goodwin
Gregory M. Goodwin
Assistant Attorney General
Missouri Bar No. 65929
P.O. Box 899
Jefferson City, Missouri 65102
Phone: (573) 751-7017
Fax (573) 751-3825
ATTORNEYS FOR STATE

CERTIFICATE OF SERVICE

The foregoing was delivered to counsel for Clemons via e-filing on November 27, 2017.

/s/ Gregory M. Goodwin
Assistant Attorney General