

**FILED**

STATE OF NORTH CAROLINA IN THE GENERAL COURT OF JUSTICE  
 12 MAY -9 AM 10:36 SUPERIOR COURT DIVISION  
 COUNTY OF DURHAM DURHAM COUNTY, C.S.C. FILE NO. 01-CRS-24821

BY                     

STATE OF NORTH CAROLINA,	)
<i>Plaintiff,</i>	)
vs.	)
MICHAEL IVER PETERSON,	)
<i>Defendant.</i>	)

**ORDER GRANTING MOTION FOR APPROPRIATE RELIEF, VACATING  
 CONVICTION AND GRANTING NEW TRIAL**

THIS CAUSE came on for hearing before the Honorable Orlando F. Hudson, Jr. Senior Resident Superior Court Judge presiding, on Motion of the Defendant for Appropriate Relief filed on February 15, 2011, based upon various federal constitutional claims. The State was present and represented by District Attorney Tracey Cline. The Defendant was present and represented by David Rudolph. Testimony was heard and evidence received from December 6, 2011 through December 15, 2011. Based upon the testimony presented to this Court, a review of the entire record to include the court file and the prior transcripts in this matter and the opportunity of this Court to observe the demeanor and credibility of the witnesses, and the circumstances of this case, this Court makes the following **FINDINGS OF FACT** and **CONCLUSIONS OF LAW**:

### FINDINGS OF FACT

1. The Defendant, Michael Peterson ("Mr. Peterson") was charged with First-Degree Murder arising out of the death of his wife, Kathleen Peterson. He was convicted by a Jury of this crime on October 10, 2003 and sentenced to the statutorily-mandated sentence of life imprisonment without possibility of parole. On November 9, 2007, his conviction was affirmed by the Supreme Court of North Carolina.

#### The Death of Kathleen Peterson

2. Kathleen Peterson died in the early morning hours of December 9, 2001. She was found dead at the foot of a staircase in her house. The cause of death was determined to be a loss of blood from injuries to her scalp. Mr. Peterson and Kathleen Peterson were married at the time of her death and lived at this house.

3. Kathleen Peterson had no fractures or other injuries to her skull. She suffered no injuries that caused damage to her brain, such as a subdural hematoma, nor did she suffer any direct injuries to her brain. She had no broken ribs, no broken bones, and no other injuries that would generally be associated with a beating.

4. There was no evidence presented at trial from any person who indicated that they observed how Kathleen Peterson sustained her injuries concurrent to the injuries occurring. There was no eyewitness testimony presented from a person who indicated that they observed any injuries being inflicting upon Kathleen Peterson that led to her death.

5. Former Special Agent Duane Deaver ("SA Deaver") of the State Bureau of Investigation arrived at the Peterson home approximately fourteen (14) hours after Kathleen Peterson's death was reported.

6. Upon SA Deaver's arrival at the Peterson home, members of the Durham Police Department informed him that they suspected that Kathleen Peterson had been murdered.

7. Within ninety (90) minutes of arriving at the Peterson home, and before performing any calculations concerning points of origin of the blood spatter in the stairway, before examining any clothing worn by Kathleen Peterson or Mr. Peterson, and before conducting any experiments concerning the way in which Kathleen Peterson could have died, SA Deaver informed Investigator Art Holland that he agreed that the death was a "homicide."

8. Mr. Peterson was charged with Kathleen Peterson's murder. The State's theory of the case was that Mr. Peterson had beaten his wife to death in the stairway.

#### The Trial of Michael Peterson

9. A trial in this case was held in the Superior Court Division of the General Court of Justice of Durham County between May and October, 2003.

10. The undersigned was the presiding Judge at the criminal trial. As a consequence, this Court had the opportunity to observe the credibility and demeanor of the witnesses at the criminal trial and to evaluate the significance of evidence presented at that trial, and its importance to the jury's verdict in this criminal trial.

11. The State's case against Michael Peterson rested on expert testimony that Kathleen Peterson's death was a "homicide" rather than an accidental fall.

12. Expert testimony was offered by both the State and Mr. Peterson. The opinions of these experts were diametrically opposite as to whether Kathleen Peterson's death was accidental as the result of a fall, or was a homicide that resulted from a beating. Experts for the State, including Dr. Deborah Radisch of the Medical Examiner's office, testified that the injuries were consistent with a beating; experts presented by Mr. Peterson, including a forensic neuro-pathologist, Jan Leetsma, testified that the injuries were consistent with an accidental fall.

13. The expert testimony of SA Duane Deaver, was highly material to issues of fact and law that the trier of fact relied on in determining that that Mr. Peterson killed Kathleen Peterson via a homicidal attack.

14. The testimony of SA Deaver was critical to the State's case. From its opening statement, the State emphasized SA Deaver's opinions, telling the jury to listen to the opinions "from Agent Duane Deaver, who is the blood spatter expert from the SBI, [which] will be . . . critical." The State explained:

[Deaver] finds what he will call several points of origin. And what he will also say is that, from his perspective, this was *very, very important*, because it was above the floor . . . . *He will say it's positioned in such a manner that these can't be due to an accidental impact on the stairs . . . .* And that will also be *very, very important evidence*.

The District Attorney further argued:

there are aspects of the blood spattering in that clothing and how it penetrated the clothing that it couldn't just be contact brush-off from what Mr. Peterson says he did, as Mr. Peterson holds and caresses her.

Tr. at 4700-4701(emphasis added).

15. The State began its evidence by focusing on the blood. Testimony about the blood at the scene and on the clothes of Mr. Peterson and Kathleen Peterson came from the Emergency Medical Technicians, the various Durham police officers who responded to the scene, and the Durham Police Department Crime Scene Technicians. SA Deaver was then called as an expert to testify about the interpretation of the bloodstain patterns, and the extent to which they proved that Michael Peterson had beaten Kameen Peterson to death.

16. After calling SA Deaver, the State sought to qualify him as an expert in bloodstain pattern analysis.

17. The State elicited SA Deaver's background, training and experience in the field of bloodstain pattern analysis. Mr. Peterson's counsel conducted a voir dire on those topics in the presence of the jury. During this voir dire, SA Deaver testified that he had:

- a. Been mentored by ODI agent Spittle, who was an expert in bloodstain pattern analysis, for a number of months before providing any opinions with regard to such analysis on his own;
- b. Participated as an expert consultant in approximately 500 bloodstain pattern analysis cases;
- c. Written approximately 200 reports as an expert relating to bloodstain pattern analysis;
- d. Personally examined approximately 15 potential crime scenes involving blood stain patterns allegedly created by falls - - some involving persons who were impaired at the time of the alleged falls - - and had made determinations that approximately 6 of these had in fact involved falls, with the remainder having been the result of criminal acts;

e. Been qualified as an expert in bloodstain pattern analysis by the courts of North Carolina on approximately 60 occasions;

f. "Typically" performed bloodstain pattern experiments as a part of his analysis;

He further testified that the experiments he performed in this case were accepted in the field of bloodstain pattern analysis. Tr. at 8155-8210.

18. After the voir dire, and before SA Deaver was permitted to present any opinions to the jury, Mr. Peterson objected to SA Deaver's qualifications as an expert in bloodstain pattern analysis and moved to bar his testimony on the ground that he was a "self-proclaimed expert" who was not qualified to render any opinions as to any bloodstain pattern interpretation. Tr. 8204. The State argued that SA Deaver's background, experience, and training qualified him to give such opinions. Tr. 8205.

19. Based upon SA Deaver's testimony as to his education, his qualifications, and his experience, this Court found that he possessed the appropriate education and training to be designated as an expert in the field of bloodstain pattern analysis. This Court therefore overruled Mr. Peterson's objections, denied his motion, and allowed SA Deaver to testify as an expert. Tr. 8206. The Court informed the jury that SA Deaver should be considered by them as an expert in the field of bloodstain pattern analysis.

20. In addition to challenging SA Deaver's qualifications, Mr. Peterson also challenged SA Deaver's opinions and testimony, filing two motions in limine. First, Mr. Peterson filed a Motion for Determination of Admissibility of Expert Opinion and Results of Experiments. Second, Mr. Peterson filed a Motion for Daubert Hearing on

### Admissibility of Expert Testimony Regarding Whether the Act that Caused Certain Bloodstains was Accidental or Intentional.

21. Mr. Peterson sought to bar SA Deaver from giving any testimony about his "experiments," and from giving opinions with regard to specific points of origin, from giving opinions as to how certain bloodstains were created at the scene, from giving opinions as to how certain bloodstains were altered at the scene, from giving opinions as to how blood was deposited on Mr. Peterson's shoes and shorts and the meaning of these stains, and from giving opinions as to how stains on Mr. Peterson's shorts were altered. A hearing on this motion was held outside the presence of the jury. Tr. 8385-8604.

22. With regard to his experiments, SA Deaver testified during this voir dire hearing that:

a. He conducted experiments so that he could formulate opinions about actions taken by various persons involved in the events that occurred at the Peterson house on December 9, 2001. Tr. 8391;

b. The tests and experiments he conducted were accepted in the field of bloodstain pattern analysis. Tr. 8392-8393;

c. He "typically" performed such experiments, particularly in complicated or large scenes to test what he thought had created the stains that were present. Tr. 8393-8394;

d. The methodology that he used in his testing and experimentation was consistent with what other experts in the field of bloodstain pattern analysis used, and was considered appropriate in research and literature in the field of bloodstain pattern analysis. Tr. 8394-8395;

e. As a bloodstain pattern analyst he was trained to do "confirmatory tests as a part of your analysis," that this is a "readily acceptable part of your work, its in the literature and in the books," and that "when you have done an analysis on a crime scene, then it behooves you to

go back into the laboratory and to - - to reproduce those patterns by actions that you believe caused the patterns in the crime scene." Tr. 8235;

f. The experiments he performed on a "to scale" reproduction of the staircase were to engage in "reverse engineering" of his calculations of three specific points of impact out in space, to "recreate" some of the stains that he saw in the actual stairway, and to recreate the dilution stains he had seen on Defendant's shorts. Tr. 8403-8408.

23. With regard to his expert opinions, SA Deaver testified on voir dire that:

a. He determined using "trigonometric functions" that a source of blood was impacted at a specific point "out in space" near the west wall of the stairway: 27 inches above step number 15, 5 inches out from the west wall, and 2 inches out from step number 14. Tr. 8415-8416;

b. He determined using "trigonometric functions" that a source of blood was impacted at two other specific points "out in space" near the east wall of the stairway: (1) 19 inches above step number 17, 8 inches out from the east wall, and 6 inches out from the north wall, and (2) 11 inches above step number 17, 2 inches out from the north wall, and 8 inches out from the east wall. Tr. 8415-8416, 8424;

c. None of these three specific points of impact were consistent with impacts on a surface, but rather were consistent with impacts "out in space," and were therefore not consistent with the actions of a fall. Tr. 8425.

d. An impact on step number 16 was not consistent with an impact from an accidental fall. Tr. 8419-8420, 8524-8525;

e. There were "cast-off" stains on the header outside the stairwell, that this cast-off was created by some object being swung upward, and that it was produced at the same time as other small stains found on the west wall near step numbers 12 and 13, by an individual standing outside the stairwell. Tr. 8415, 8416, 8421-8422;

f. Mr. Peterson's shorts had been "*in close proximity* to a point of origin" *of at least one impact*, that Mr. Peterson's sneakers had been worn *at the time* that an impact was occurring, that the shoes and or the source of blood was "*in motion*" at the time that the blood was deposited on Mr. Peterson's shoes, that the "wearer of those shoes and those shorts was involved in impacting a source of blood, in this case the victim, at some



time," and that the wearer of those shorts was "in very close proximity to a source of blood when it was impacted." Tr. 8427-8428, 8430-33 (emphasis added).

g. He would not have been able to form these opinions regarding Mr. Peterson's shoes and shorts without having done the experiments, and his opinion was based upon those experiments. Tr. 8550-8552, 8555-8556.

h. The "first part of this assault" occurred with the victim inside the stairway and the suspect outside the stairwell. Tr. 8430.

i. Step number 17, the riser between step numbers 16 and 17, and the void area on the north wall were cleaned, and that it "took some effort" to do so. Tr. 8418-8419; 8423-8424.

j. Mr. Peterson had poured water on the front of his pants in order to wash away bloodstains. SA Deaver would not have been able to form that opinion without the experiments he conducted, and that this opinion was based upon the experiments. Tr. 8556-8557.

24. SA Deaver also testified during the voir dire that he did not photograph the stringing process through which he determined the three specific points of impact because no other expert would be able to go back and determine if the stringing was done correctly, or if the results were accurate, from photographs. Tr. 8490.

25. Following the voir dire, which included cross-examination relating to these opinions, Mr. Peterson renewed his motion to exclude any testimony about the experiments performed by SA Deaver, or about his opinions regarding what the bloodstains at the scene and on the clothes showed about what had occurred at the scene. Mr. Peterson argued that the experiments were not a reliable basis for the opinions to which SA Deaver was testifying, and that the other opinions, such as that the impact on step 17 was not from a fall, went beyond what a qualified bloodstain pattern analyst could

scientifically determine. Tr. 8604-8611. The State argued that SA Deaver had a rational basis for his opinions, that other qualified experts in the field use the same methodology, and that SA Deaver's opinions were of the type given in this field all the time. Tr. 8611-8613.

26. Based upon the arguments of the State, SA Deaver's testimony the undersigned judge overruled Mr. Peterson's objections. The Court specifically finds as a fact that SA Deaver represented to the Court that he had the requisite knowledge, training, education and experience, to (1) conduct these experiments, (2) to design them in accord with the way in which other qualified experts in the field would design these experiments, (3) to be familiar with the methodology of other qualified experts in the field, and (4) to explain them to the jury. These representations to this Court were highly material to the court as it denied Defendant's motion in limine and allowed SA Deaver to testify about his experiments and about the opinions elicited during the voir dire. Tr. 8613-8614.

27. Specifically, and based upon the State and SA Deaver's representations concerning his education, his knowledge, his training and his experience, this Court found that "the experiments conducted by Agent Deaver are of the type routinely used in this field, were conducted in a reliable manner, and provided part of the reliable basis to support his conclusions." This Court also held that all of SA Deaver's opinions were "reliable in that sufficient facts or underlying data form a reliable basis to support each opinion." This Court therefore allowed SA Deaver to testify as an expert on these matters.

28. SA Deaver testified before the Jury that the death of Kathleen Peterson was a homicide. He testified that he reached that conclusion after visually examining the

stairway. Specifically, he determined there were three specific "points of origin" for the blood spatter in the stairway that were "out in space" (*i.e.* not emanating from any surface in the stairway), and that these were the result of "impacts" (*i.e.* blows to the head). This formed the basis for one of the important opinions SA Deaver testified to at the trial: that the blood spatter in the stairway was not consistent with a fall, and was consistent with an intentional beating, because there were three "points of origin" for the blood that were located "out in space."

29. SA Deaver also testified that he determined that an area of impact on one of the steps was "too forceful" to be the result of a fall, and that it was the result of Kathleen Peterson's head being intentionally impacted into the step. He further testified that other bloodstains on the steps had been "intentionally" cleaned up.

30. Finally, SA Deaver testified that he performed a series of scientifically valid experiments and relied upon these in reaching various opinions. Based on these experiments, he testified that he had determined that Kathleen Peterson and/or Mr. Peterson were "moving" when blood spatters were deposited on Mr. Peterson's sneakers, and that Mr. Peterson's shorts had been in close proximity to "an impact" to Kathleen's Peterson's head. These opinions were the basis for the conclusion that it was Mr. Peterson, wearing the shorts and the sneakers Deaver had inspected, who had beaten Kathleen Peterson to death in the stairway. While other experts testified before the Jury offering opinions that the injuries to Kathleen Peterson resulted from an assault - - evidence that was disputed by Defendant's experts - - no expert other than SA Deaver tied Mr. Peterson to the alleged assault.

31. SA Deaver's testimony was also used by the prosecutors to impeach Mr. Peterson's statement to the 911 operator and to the police investigators that he had found Kathleen Peterson's body at the foot of the stairs.

32. Although SA Deaver was cross-examined about his opinions and the basis of those opinions, he often avoided answering questions by offering lengthy explanations. This Court admonished SA Deaver several times to answer the questions posed before trying to explain his answer. *See, e.g.*, Tr. at 8918; 9012-9016. When confronted with learned treatises he had read, SA Deaver refused to concede that his testimony was mistaken or inaccurate. When faced with his prior inconsistent testimony from other cases, SA Deaver claimed a lack of memory, explained the inconsistent statements away, or both. *See, e.g.*, Tr. at 9247-48.

33. SA Deaver's testimony, including voir dire, encompasses nearly 1,000 pages of transcript. The State's entire case-in-chief occupied 6,000 pages of transcript. SA Deaver was the central and most critical witness in the State's case against Mr. Peterson.

34. In their closing arguments, the prosecutors stressed repeatedly the importance of the blood spatter evidence, SA Deaver's opinions about that evidence, and his honesty and integrity. The State argued that for the jury to believe the defense experts, "you're just going to have to believe that Duane Deaver is just a liar. And he has no reason in the world to come up here and lie to you." The prosecutor continued that Deaver worked "for your state, North Carolina . . . , *for us*," and that he

gave you truthful and accurate information. And you know what? They didn't get paid not one penny extra to come in here. Deaver should have, my goodness what he had to go through on the witness stand, but, no, he

didn't get an extra penny. . . *They are tried and true. Tried and true.  
Because they work for us . . . For our state.*

Tr. at 13194 (emphasis supplied). The prosecutor continued, arguing that SA Deaver had  
"been in this very courtroom before" and

testified in front of people just like you. Durham County juries . . . .  
And because they have to go face Durham County juries again . . . why  
in the world would they stake their reputation, their integrity, why would  
they stick their necks out to ruin their reliability when they know they've  
got to face people like you again? The answer to that question is they  
wouldn't. They wouldn't. They wouldn't come in here and give you  
inaccurate information. They're not going to do that."

Tr. at 13199-200, 13216-220.

35. In his final argument, the Durham County District Attorney referred to SA  
Deaver as "obviously central to this case." At another point he referred to SA Deaver as  
"very central to the state's case." He then proceeded to detail exactly how SA Deaver's  
testimony established Mr. Peterson's guilt: he argued, based on SA Deaver's testimony,  
that Mr. Peterson had beaten Kathleen Peterson with some object, that the assault began  
by the 15<sup>th</sup> step, that Kathleen Peterson "goes down" and Mr. Peterson struck her "at least  
two more times" near the corner ("hitting her at two points out in space"), that she was  
"fighting for her life," that "the defendant was in close proximity to Kathleen when at  
least one impact occurred" and that he was "standing over her, striking her," that the  
spatter on the sneakers "means that when he had these things on, he had to be striking  
her," that the shoeprint in blood on Kathleen Peterson's sweatpants means "he has to be in  
close proximity when some of these actions occurred," that Kathleen Peterson "was  
struck, that she went down, that she was probably down for some period of time. She

began to bleed and then she got up. And he [Mr. Peterson] realized it, as he was going through the process of cleaning up everything, and then had to continue the assault." Tr. at 13240, 13247-13254.

36. The District Attorney then described what he called "a second assault." Tr. at 13255-13256. Based upon SA Deaver's testimony, he argued:

this was when Mike Peterson "*developed premeditation during the assault . . . That's why I told you it was so very important to consider that there were two assaults. What we contend to you, ladies and gentlemen, is that he assaulted her, she went down, he continued to assault her, and that's when the premeditation formulated . . . [W]hatever it was that caused the initial assault . . . during the assault, he develops the intent to complete the act and to kill Kathleen Peterson.*"

Tr. at 13260-13262 (emphasis supplied).

37. After noting that the State was not claiming that there was any premeditation prior to the alleged assault beginning, the District Attorney went on to note that premeditation and deliberation are usually proved by circumstances. He continued:

*"this is the one [circumstance] that I want you to focus on. Infliction of lethal wounds after the victim was felled. That's why this second assault is very important. That's why the cleanup here is very important. That's why the blood spatter, impact spatter, on top of the cleanup is very important. That shows there was a second assault. That shows he inflicted lethal wounds after the victim was felled."*

Tr. at 13262 (emphasis supplied).<sup>1</sup>

38. The State's case proving Mr. Peterson's premeditation rested solely on the testimony of SA Deaver.

---

<sup>1</sup> Fourteen of the thirty-four pages of the District Attorney's closing argument, more than 40%, was devoted to and based upon Deaver's opinions.

39. Similarly, without SA Deaver's opinion testimony about Peterson's shorts and sneakers, there was no evidence that Mr. Peterson was present in the stairway when Kathleen Peterson sustained the injuries to her scalp.

40. The jury deliberated for part of the day on October 6, 2003, for three full days on October 7-9, 2003, and for part of the day on October 10, 2003, not reaching a verdict until about noon that day. It found Mr. Peterson guilty of the premeditated and deliberate murder of his wife, Kathleen Peterson. Mr. Peterson was sentenced to the mandatory term of life imprisonment without parole.

The Hearing on the Motion for Appropriate Relief

41. On February 15, 2011, Mr. Peterson filed a Motion for Appropriate Relief. This Court subsequently ordered an evidentiary hearing on the Motion for Appropriate Relief.

42. An evidentiary hearing was held on the Motion for Appropriate Relief from December 6, 2011 through December 15, 2011.

43. Defendant called nine fact witnesses at the hearing: Eric Hooks, an Assistant Director of the SBI, SBI Agents Russell Holley and Kristin Hughes, former FBI Special Agent Chris Swecker, investigator Ron Guerette, and four defense attorneys in cases in which Deaver had testified, Brad Bannon, William Gerrans, Diane Savage and Mike Klinkosum. The Court listened to the testimony and observed the demeanor of these witnesses, and finds that each gave credible and truthful testimony on every issue that was material to the findings of fact and conclusions of law which are necessary to reach a ruling on the issues raised in the instant matter

44. In addition, Defendant called three nationally recognized experts in the field of blood spatter analysis, Thomas Bevel, Paulette Sutton and Timothy Palmbach, and submitted an affidavit from a fourth nationally recognized expert, Stuart James. These experts offered opinions about the scientific validity and the acceptability within the field of bloodstain pattern analysis of SA Deaver's trial testimony on various topics, including his determination of three specific "points" of impact "out in space," the validity of SA Deaver's experiments and the opinions he based on these experiments, and SA Deaver's ability to determine that a specific impact was caused by an "intentional" act and that certain bloodstains were "intentionally cleaned." The Court has considered the background, training and experience of each of these experts, and finds that each is eminently qualified as an expert in the field of bloodstain pattern analysis, and that each is familiar with what is scientifically acceptable in that field. The Court, after listening to the testimony and observing the demeanor of Mr. Bevel, Ms. Sutton, and Mr. Palmbach, further finds that each carefully examined the expert testimony given by SA Deaver at the Defendant's trial, and that each gave credible and truthful testimony. The Court further finds that the affidavit of Mr. James corroborated the opinions and conclusions of Mr. Bevel, Ms. Sutton and Mr. Palmbach.

45. The court also considered the testimony of the witnesses called by the State, including SBI Agent Blain Hicks and Assistant Attorney General Angel Gray, and the proffers made by the District Attorney. Notably, the State did not call SA Deaver as a witness nor tender any further statements by him under oath.



46. The Court finds that the District Attorney contacted a number of nationally recognized experts in the field of bloodstain pattern analysis, including Bart Epstein, Terry Laber and Herbert MacDonnell, in preparing for this hearing. None of the experts contacted by the state in preparation for the hearing were called to the stand by the State at any point from December 6, 2011 to December 15, 2011. The State presented no new evidence that SA Deaver's experiments, his opinion that he was able to determine three specific "points of impact" "out in space," or his testimony that certain bloodstains on the steps were either created or removed "intentionally," were scientifically valid in the field of bloodstain pattern analysis.

47. Finally, the Court considered the exhibits submitted by each of the parties.

#### Expert Testimony and Bloodstain Analysis

48. This Court finds that jurors generally are not well equipped to evaluate complex expert testimony in part because they cannot use their own knowledge, life experiences and common sense to fully evaluate what is a particularized area of expertise.

49. This Court further finds that when a witness has been declared an "expert" by the Court, that witness comes to the witness stand with a presumption of objectivity and integrity. In the case of an expert witness who is a full time employee of the State of North Carolina it is very probable that a juror would consider that these persons are more credible because while he is an employee of the State, he is not being "paid for his testimony." Where experts disagree, the jury is often forced to rely upon what they have been told about the competing experts, and their alleged motivation for testifying, in

considering the substance of their testimony. In short, all expert testimony comes with unique dangers that can undermine the jury's ability to ascertain its trustworthiness.

50. Consequently, evidence concerning an expert witness's qualifications, his bias, and the integrity of his methods, is critical to any determination of an expert's credibility and the believability of his opinions.

51. In 2009, the National Academy of Sciences conducted a study of forensic sciences entitled *Strengthening Forensic Science in the United States: A Path Forward*. That study specifically discussed the significant limitations on bloodstain pattern analysis, and its particular susceptibility to fraud and abuse:

Bloodstain patterns found at scenes can be complex, because although overlapping patterns may appear simple, in many cases their *interpretations are difficult or impossible*.

\* \* \*

In general, the opinions of bloodstain pattern analysts are *more subjective than scientific*. In addition, many bloodstain pattern analysis cases are prosecution driven or defense driven, with targeted requests that can lead to *context bias*.

\* \* \*

Scientific studies support some aspects of bloodstain pattern analysis. One can tell, for example, if the blood spattered quickly or slowly, but *some experts extrapolate far beyond what can be supported*.

\* \* \*

[E]xtra care must be given to the way in which the analyses are presented in court. *The uncertainties associated with bloodstain pattern analysis are enormous*.

*Strengthening Forensic Science in the United States: A Path Forward*, <http://www.nap.edu/catalog/12589.html>, at pages 177-179 (emphasis supplied).

Post-Conviction Evidence of SA Deaver's Conduct

52. In October 2009, a U.S. District Court Judge, in a habeas corpus proceeding concerning a criminal case in 1993 (*State v. Goode*), found that SA Deaver "falsely portrayed to the jury that he conducted a test for blood that indicated blood . . . was on petitioner's boot" and that "the State, through Agent Deaver, presented misleading evidence about the testing done on petitioner's boot being conclusive for blood." Peterson Motion for Appropriate Relief at Exhibit C 25, 27.

53. In 2010, an investigative series of articles into the SBI Bloodstain Pattern Analysis Unit (which included SA Deaver) by the *Raleigh News & Observer*, found that this unit operated without any written policies from 1988 until October 2009. The North Carolina Attorney General suspended the entire unit in August 2010, expressing concerns about the work they had performed and doubts about their training and experiments. The Attorney General noted that he was "concerned about the potential of influence of prosecutors on the opinions of some SBI agents regarding this science." *Raleigh News & Observer, Bloodstain Analysis Team Had No Guidelines For 21 Years*, September 10, 2010.

54. An Independent Review commissioned by the North Carolina Department of Justice, and conducted by two former high ranking officials of the Federal Bureau of Investigation, who were chosen by the Attorney General, looked only at one small part of

Agent Deaver's conduct as an expert at the SBI: how he reported the results of blood testing on his laboratory reports. It found that:

in a *sampling* of lab files assigned to Agent Deaver from 1988 through 1993 (when he left the lab to become a full-time blood spatter analyst) in which a positive presumptive test was followed by a negative Takayama test, 34 reports failed to mention the negative confirmatory test. In five instances the report stated that 'the quantity of stain was insufficient for further testing' or 'the quantity of stain was insufficient to test further' when in fact a Takayama test (sometimes multiple tests) was conducted on the item(s) and the corresponding lab notes reflected a negative result.

Swecker & Wolf, Independent Review of the SBI Forensic Laboratory, attached as Exhibit B, page 18 (hereinafter the "Swecker Report"). In describing how the results of the review were organized, the report noted that the fourth and most serious category of misconduct involved cases in which the results contained in the lab report were *completely inconsistent* with the results reflected in the internal lab notes.

There were five such cases in this category, *all handled by SA Deaver. One of these cases involved a defendant who was executed.* In two instances the words 'revealed the presence of blood' were used [in the lab report] when in fact the results of the confirmatory test were reflected in the [lab] notes as negative . . . . In three other instances the [lab] report stated that further tests were 'inconclusive' or 'failed to give any result' when the lab notes reflect negative results."

*Id.* at page 11(emphasis added).

55. The Independent Review further found that SA Deaver has testified falsely before the North Carolina Innocence Commission in February 2010 when he inaccurately described both SBI and ASCLD/LAB policies. *Id.* at 12.

56. In 2010, and in response to this series of articles by the *Raleigh News & Observer* and the suspension of the Bloodstain Analysis Unit, the SBI conducted its own

extensive investigation into SA Deaver's background, his training, his education and his experience. The SBI interviewed many of the agents who had worked with SA Deaver over the years, including his supervisors and other lab and field agents, reviewed the SBI records relating to SA Deaver's training and work in bloodstain pattern analysis (including SA Deaver's own list of cases from 1988-1994), and interviewed SA Deaver several times.

57. Following this investigation, SA Deaver was terminated by the SBI "for cause" on January 7, 2011.

#### SA Deaver's Qualifications

58. In addition to the SBI investigation, and based upon the results of that investigation and the matters set forth in the Motion for Appropriate Relief, Mr. Peterson obtained from this Court an order requiring the SBI to produce all files reflecting any work done by SA Deaver with regard to cases involving bloodstain pattern analysis from 1988 through 2003. In response, the SBI conducted another search of its files, including an electronic search for any file containing the words "bloodstain pattern analysis" or "blood spatter anywhere in the document, and a hand search of additional files that might relate to any such analysis.

59. The evidence presented by Mr. Peterson at the hearing, including the testimony of the witnesses, the SBI investigation, and the documentary exhibits submitted to the Court, establish as fact that:

a. SA Deaver has never been mentored or supervised by SBI Agent Spittle at any time. This is directly contrary to SA Deaver's testimony at the criminal trial.

b. From 1988 until August 2003 (the date of his testimony at Mr. Peterson's trial), SA Deaver had participated in 54 cases involving the analysis of bloodstains. This is directly contrary to SA Deaver's testimony at the criminal trial that he had been involved in 500 such cases.

c. From 1988 until August 2003, SA Deaver had written reports in 36 cases involving bloodstain pattern analysis. This is directly contrary to SA Deaver's testimony at the criminal trial that he had written 200 such reports.

d. From 1988 until August 2003, SA Deaver had been to the scene of any potential crime only 17 times. In only 9 of those cases did he provide a bloodstain pattern analysis. Only 6 of these cases involved bloodstain pattern analysis inside of a home.

e. Before being called to the Peterson home on December 9, 2001, SA Deaver had not conducted any bloodstain pattern analysis at a potential crime scene since April 10, 1997.

f. Before being called to the Peterson home on December 9, 2001, SA Deaver had never been to a potential crime scene in which he was called upon to conduct a bloodstain pattern analysis to determine whether an accidental fall or an assault had occurred. This is directly contrary to SA Deaver's testimony at the criminal trial that he had been to the scene of 15 cases in which falls were involved and for the purpose of conducting bloodstain analysis.

g. SA Deaver had not been qualified as an expert in bloodstain pattern analysis 60 times. This was directly contrary to SA Deaver's testimony at the criminal trial.

h. Contrary to SA Deaver's testimony in the criminal trial that he "typically" performed experiments for the purpose of analyzing bloodstain patterns at crime scenes, SA Deaver had performed experiments in only three cases prior to the experiments he conducted in this case in September 2002. The last experiment he performed was in June 1991. One of the three experiments done before 1991 involved smashing pumpkins with a wooden two by four, to determine if a person present at the scene of a beating would have gotten blood on his clothing. The trial judge in that case did not permit this evidence, or SA Deaver's opinion, to be admitted at the trial. SA Deaver performed no other experiments in any criminal case for the purpose of analyzing bloodstain patterns between June 1991 and September 2002, when he conducted the experiments in this case.

60. SA Deaver deliberately and intentionally misled this Court at Mr. Peterson's trial about his knowledge, education, training and experience.

61. SA Deaver deliberately and intentionally misled the Jury at Mr. Peterson's trial about his knowledge, education, training and experience.

62. The matters of SA Deaver's education, knowledge, training and experience were highly material and critical matters in Mr. Peterson's trial.

63. The matters of SA Deaver's education, knowledge, training and experience were highly material and critical matters to his credibility in Mr. Peterson's trial.

64. The facts necessary to demonstrate these misrepresentations were not in the possession of Mr. Peterson at the time of his criminal trial and could not have been discovered by him (or his counsel) in the exercise of reasonable diligence.

65. Because the Court during Mr. Peterson's trial relied on the testimony and arguments from that SA Deaver and the State of North Carolina it determined that they accurately representing his education, knowledge, training and experience. Consequently there was no good faith basis upon which Mr. Peterson or his counsel could have sought to compel discovery into these qualifications, nor would this Court - - again relying on SA Deaver's representations and the arguments from the State - - have allowed such discovery.

66. The facts necessary to demonstrate these misrepresentations were contained within the files or were within the knowledge of agents of the State Bureau of Investigation (including SA Deaver), an official investigative agency of the State of North Carolina that participated in the investigation and prosecution of Mr. Peterson.

67. This information was not provided to Mr. Peterson or his counsel prior to or during the course of Mr. Peterson's trial.

68. At no time during the course of Mr. Peterson's trial did the State correct or attempt to correct SA Deaver's material misrepresentations.

69. If this Court had been aware that SA Deaver was misrepresenting his education, his knowledge, his training and his experience, this Court would have sustained Mr. Peterson's objection to the State's tender of SA Deaver as an expert witness and would have granted Mr. Peterson's Motion to bar SA Deaver's testimony and would have compelled the production of all impeachment information from the files of the SBI

70. If this Court had been aware that SA Deaver was misrepresenting his education, his knowledge, his training and his experience, this Court would not have permitted SA Deaver to testify as an expert at Mr. Peterson's trial or to offer opinions to the jury.

71. This Court finds as a fact that SA Deaver's testimony had a material impact on the deliberations and verdict of the jury. Specifically, based upon the Court's opportunity to see and hear the witnesses and oversee Mr. Peterson's trial, and in light of the length of the jury's deliberations, the criticality and importance of SA Deaver to the State's case against Mr. Peterson, the criticality and importance of the issues on which SA Deaver offered opinions, the significance of SA Deaver's misrepresentations, and the fact that Mr. Peterson presented substantial evidence contrary to SA Deaver's opinions, this Court finds as a fact that SA Deaver's misrepresentations as to his education, his



knowledge, his training and his experience had a substantial and injurious effect on the outcome of Mr. Peterson's trial.

SA Deaver's Bias

72. The evidence presented by Mr. Peterson at the hearing which occurred from December 6, 2011 through December 15, 2011, including the testimony of the witnesses, the SBI investigation, and the documentary exhibits submitted to the Court, provide substantial evidence of SA Deaver's bias.

73. The evidence shows and this Court finds as fact that:

a. As early as 1988, SA Deaver's supervisors noted that he had a strong bias in favor of the prosecution when testifying during training exercises;

b. SA Deaver's direct supervisor, SA Mark Nelson, told SBI investigators that Deaver was "never willing" to admit he was wrong or mistaken;

c. During the period between 1988 and 1994, Deaver prepared misleading lab reports, and omitted exculpatory information from lab reports he prepared. In at least 34 cases, SA Deaver reported positive results of presumptive tests for the presence of blood, while at the same time failing to report negative results of confirmatory tests;

d. SA Deaver testified at Mr. Peterson's trial that the reason he did not note in his reports any alleged cast-off patterns in the hallway, or cleanup in the stairway, was because SBI policy precluded him from doing so. In fact, SA Deaver had been specifically informed by the SBI's legal counsel years earlier that both opinions and conclusions could be contained in SBI reports filed by SBI experts;

e. In 2010, a U.S. District Court Judge found that SA Deaver gave testimony that created a false impression in the death penalty trial of George Goode by testifying there was blood on the defendant's boots that was invisible to the naked eye, and that the testing done on Goode's boots was conclusive for blood. Goode's sentence was vacated as a result;

f. In 2007, SA Deaver allowed SBI agent Gerald Thomas, who he trained in blood spatter interpretation, and who he supervised in the case of *State v. Kirk Turner*, to materially change a report reflecting his opinion about how a

bloodstain was deposited on defendant's shirt without disclosing or indicating in the report that the opinion had been changed. SA Deaver then assisted SA Thomas in designing and conducting a scientifically invalid experiment designed to "shore up" the amended opinion.

h. In 2010, SA Deaver unsuccessfully attempted to get SBI Agent Russ Holley to testify in the case of *State v. Gregory Taylor* that a stain depicted by a photograph was blood. SA Deaver repeatedly stated to SA Holley and SBI Agent Kristin Hughes that Taylor was guilty, and provided inaccurate testimony before the Innocence Commission Three-Judge Panel with respect to whether SBI and ASCLD/LAB policies required him to report lab results in a false and misleading manner that concealed exculpatory information.

74. This Court finds as a fact that SA Deaver exhibited a pattern of bias in favor of the State and against criminal defendants that was repeated over the course of twenty years.

75. This Court further finds as a fact that information as to SA Deaver's bias was known to his supervisors and other agents at the SBI. This knowledge is appropriately imputed to the prosecutors for the State of North Carolina.

76. SA Deaver deliberately and intentionally misled this Court at Mr. Peterson's trial about his lack of bias and his objectivity.

77. SA Deaver deliberately and intentionally misled the Jury at Mr. Peterson's trial about his lack of bias and his objectivity.

78. The matters of SA Deaver's bias and objectivity were material and critical matters in Mr. Peterson's trial.

79. The matter of SA Deaver's bias and objectivity were material and critical matters to his credibility in Mr. Peterson's trial.

80. The facts necessary to demonstrate these misrepresentation were not in the

possession of Mr. Peterson at the time of his criminal trial and could not have been discovered by him (or his counsel) in the exercise of reasonable diligence.

Because the Court during Mr. Peterson's trial relied on the representations that SA Deaver was not biased and was testifying in an objective manner based upon scientific analysis and conclusions, there was no good faith basis upon which Mr. Peterson or his counsel could have sought discovery into SA Deaver's bias, nor would this Court - - again relying on SA Deaver's representations - - have allowed such discovery.

81. The facts necessary to demonstrate these misrepresentations were contained within the files or were within the knowledge of agents of the State Bureau of Investigation (including SA Deaver), an official investigative agency of the State of North Carolina that participated in the investigation and prosecution of Mr. Peterson.

82. This information was not provided to Mr. Peterson or his counsel prior to or during the course of Mr. Peterson's trial.

83. At no time during the course of Mr. Peterson's trial did the State correct or attempt to correct SA Deaver's material misrepresentations.

84. If this Court had been aware that SA Deaver was misrepresenting his objectivity and lack of bias, this Court would have sustained Mr. Peterson's objection to the State's tender of SA Deaver as an expert witness and would have granted Mr. Peterson's Motion to bar SA Deaver's testimony.

85. If this Court had been aware that SA Deaver was misrepresenting his objectivity and lack of bias, this Court would not have permitted SA Deaver to testify as an expert at Mr. Peterson's trial or to offer opinions to the jury.

86. This Court finds as a fact that SA Deaver's testimony had a material impact on the deliberations and verdict of the jury. Specifically, based upon the Court's opportunity to see and hear the witnesses and oversee Mr. Peterson's trial, and in light of the length of the jury's deliberations, the criticality and importance of SA Deaver to the State's case against Mr. Peterson, the criticality and importance of the issues on which SA Deaver offered opinions, the significance of SA Deaver's misrepresentations, and the fact that Mr. Peterson presented substantial evidence contrary to SA Deaver's opinions, this Court finds as a fact that SA Deaver's misrepresentations as to his bias and objectivity had a substantial and injurious effect on the outcome of Mr. Peterson's trial.

87. In addition, the State in Mr. Peterson's trial specifically argued as a basis for a conviction SA Deaver's lack of bias and his objectivity. Had the truth been known, the State could not have made such arguments, arguments that this Court finds were central and critical to the State's case.

The Validity and Acceptance of SA Deaver's Experiments and Opinions

88. The evidence presented by Mr. Peterson at the hearing, including the testimony of the witnesses, the SBI investigation, and the documentary exhibits submitted to the Court, establish that SA Deaver's experiments and opinions were not scientifically valid and were not generally accepted in the field of bloodstain pattern analysis in 2003.

89. This evidence establishes as fact that:

a. Before December 2001, when he went to the Peterson house, SA Deaver had never done any stringing inside a house in order to determine points of impact;

b. It is scientifically impossible to determine precise and specific "points" of origin or impact from the bloodstains found at the scene using any methodology. At most one can determine an area of origin that encompasses a circle or oval that is about twelve inches in diameter;

c. SA Deaver's testimony that he determined three specific points of impact out in space, located (a) 27 inches above step number 15, 5 inches out from the west wall, and 2 inches out from step number 14; (b) 19 inches above step number 17, 8 inches out from the east wall, and 6 inches out from the north wall; and (c) 11 inches above step number 17, 2 inches out from the north wall, and 8 inches out from the east wall is not scientifically valid, and is below the acceptable standards in the field of bloodstain pattern analysis;

d. SA Deaver's testimony that his determination of three specific points of origin out in space was inconsistent with a fall is not scientifically valid, and is below the acceptable standards in the field of bloodstain pattern analysis;

e. It is not scientifically possible to determine whether an impact on a step is due to an accidental fall or an intentional act, and SA Deaver's testimony that the bloodstains on step number 17 were inconsistent with a fall is not scientifically valid, and is below the acceptable standards in the field of bloodstain pattern analysis;

f. It is not scientifically possible to determine whether the alteration of a specific bloodstain in the stairway at the Peterson's house was done intentionally, and SA Deaver's testimony that various stains at the scene were altered intentionally is not scientifically valid, and is below the acceptable standards in the field of bloodstain pattern analysis;

g. The bloodstains on the header outside the stairway are traveling in opposite directions to one another, and SA Deaver's testimony that these two stains are part of the same cast-off pattern, and that this pattern was created at or about the same time as other stains inside the stairway, by a person outside the stairway assaulting a victim inside the stairway, is not scientifically valid, and is below the acceptable standards in the field of bloodstain pattern analysis;

h. SA Deaver did not typically do experiments when analyzing bloodstains;

i. None of the experiments conducted by SA Deaver in Mr. Peterson's case are scientifically valid, nor did they yield results that are reliable, or that can be used to support opinions in the field of bloodstain pattern analysis;

j. The methodology used by SA Deaver in his experiments, which was to attempt to recreate the bloodstain patterns he found at the scene, is not accepted by other experts in the field of bloodstain pattern analysis, is not accepted in the literature in this field, and is in fact below the acceptable standards in this field;

k. It is not scientifically possible to determine from the experiments performed by SA Deaver whether the shoes and shorts worn by Mr. Peterson on December 9, 2001 were in close proximity to an impact inflicted on Kathleen Peterson, and SA Deaver's testimony that he determined this based upon these experiments is not scientifically valid, and is below the acceptable standards in the field of bloodstain pattern analysis;

l. It is not scientifically possible to determine from the experiments performed by SA Deaver whether the diluted stains on the front of Mr. Peterson's shorts were created by pouring water on the shorts, and SA Deaver's testimony that he determined this was the cause of the dilution based upon the experiments is not scientifically valid, and is below the acceptable standards in the field of bloodstain pattern analysis.

90. This Court further finds as a fact that information as to lack of scientifically validity or acceptance of SA Deaver's opinions, methods and experiments was either known or should have been known to his supervisors and other agents at the SBI.

91. SA Deaver deliberately and intentionally misled this Court at Mr. Peterson's trial about the scientific basis and acceptability of his opinions, methods and experiments.

92. SA Deaver deliberately and intentionally misled the jury at Mr. Peterson's trial about the scientific basis and acceptability of his opinions, methods and experiments.

93. The matters of the lack of scientific basis and acceptability for SA Deaver's opinions, methods and experiments were material and critical matters in Mr. Peterson's trial.

94. The matters of the scientific basis and acceptability for SA Deaver's opinions, methods and experiments were material and critical matters to SA Deaver's credibility in Mr. Peterson's trial.

95. The matters of the scientific basis and acceptability for SA Deaver's opinions, methods and experiments were material and critical matters to the credibility of the State's evidence in Mr. Peterson's trial.

96. Because the Court during Mr. Peterson's trial relied on the accuracy of SA Deaver's sworn testimony concerning the scientific basis and acceptability for his opinions, methods and experiments was truthful, there was no good faith basis upon which Mr. Peterson or his counsel could have sought discovery into these matters, nor would this Court - - again relying on SA Deaver's representations - - have allowed such discovery.

97. The facts necessary to demonstrate these misrepresentations were contained within the files or were within the knowledge of agents of the State Bureau of Investigation (including SA Deaver), an official investigative agency of the State of North Carolina that participated in the investigation and prosecution of Mr. Peterson.

98. This information was not provided to Mr. Peterson or his counsel prior to or during the course of Mr. Peterson's trial.

99. At no time during the course of Mr. Peterson's trial did the State correct or attempt to correct SA Deaver's material misrepresentations.

100. If this Court had been aware that SA Deaver was misrepresenting the scientific basis and acceptability of his opinions, methods and experiments, this Court would have sustained Mr. Peterson's objection to the State's tender of SA Deaver as an

expert witness and would have granted Mr. Peterson's motion to bar SA Deaver's testimony.

101. If this Court had been aware that SA Deaver was misrepresenting the scientific basis and acceptability of his opinions, methods and experiments, this Court would not have permitted SA Deaver to testify as an expert at Mr. Peterson's trial or to offer opinions to the jury.

102. This Court finds as a fact that SA Deaver's testimony had a material impact on the deliberations and verdict of the jury. Specifically, based upon the Court's opportunity to see and hear the witnesses and oversee Mr. Peterson's trial, and in light of the length of the jury's deliberations, the criticality and importance of SA Deaver to the State's case against Mr. Peterson, the criticality and importance of the issues on which SA Deaver offered opinions, the significance of SA Deaver's misrepresentations, and the fact that Mr. Peterson presented substantial evidence contrary to SA Deaver's opinions, this Court finds as a fact that SA Deaver's misrepresentations as to the scientific basis and acceptability of his opinions, methods and experiments had a substantial and injurious effect on the outcome of Mr. Peterson's trial.

103. From the time of Kathleen Peterson's death through December 15, 2011, the State Bureau of Investigation was an investigatory agency for the State of North Carolina as defined by N.C.G.S. 15 A-903.

104. The State did not deny that the information, recently disclosed to Mr. Peterson, regarding the competency and bias of SA Deaver was not maintained in the files of the SBI. Neither did the State deny that the information was not provided to Mr.



Peterson in a manner that allowed his counsel to make effective use of it at trial, nor released to him post conviction as a disclosure of exculpatory information as a voluntary disclosure of the State.

105. Mr. Peterson did not argue nor present any evidence to the Court that any prosecutor failed to make a diligent inquiry into the bias and competency of SA Deaver in the matter at hand. The Court makes no findings on that issue for that reason.

106. It is well settled law that an untimely release of exculpatory information is a suppression of information and the intent of the prosecutor be it benign, malignant or negligent is irrelevant to establishing whether a *Brady* violation occurred.

107. The duty and obligation to furnish required information to Mr. Peterson rest exclusively with the State of North Carolina through the attorneys acting on behalf of the Durham District Attorney's Office.

108. Each of the *Brady* violations outlined within the body of this order individually and cumulatively constitutes a violation of the United States Constitution that warrants that the conviction of Mr. Peterson be vacated and a new trial granted.

*Based upon the foregoing FINDINGS OF FACT, this Court enters the following CONCLUSIONS OF LAW:*

**CONCLUSIONS OF LAW**

109. Mr. Peterson's Motion for Appropriate Relief raised a constitutional

claim: A violation of his right to Due Process and a Fair Trial under the Fifth and Fourteenth Amendments pursuant to *Brady v. Maryland*, 373 U.S. 83 (1967). Mr. Peterson's claim under *Brady* is that the State possessed considerable exculpatory and impeaching evidence concerning SA Deaver's education, knowledge, training and qualifications, concerning his bias, and concerning the scientific basis and acceptability of his opinions, methods and experiments, which was not disclosed. The failure to disclose material and exculpatory evidence in a timely manner is a violation of the Fifth and Fourteenth Amendments.

**Michael Peterson Was Deprived of His Right to Due Process of Law and a Fair Trial By The Failure of the State to Disclose Evidence That Was Exculpatory and Which Would Have Impeached the Credibility of Deaver and of the Investigation**

110. In *Brady v. Maryland*, 373 U.S. 83 (1963), the U.S. Supreme Court ruled that the Due Process Clause of the Fourteenth Amendment was violated when the State withheld evidence from the defendant that was material to either the defendant's guilt or his punishment: "the suppression of evidence favorable to an accused upon request violates due process when the evidence is material either to guilt or to punishment irrespective of the good faith or bad faith of the prosecution."

111. Subsequently, the Supreme Court applied the principles of *Brady* to cases in which no request for such evidence had been made by the defendant, *United States v. Agurs*, 427 U.S. 97 (1976), made clear that evidence that impeached the State's witnesses was a category of evidence considered exculpatory or favorable under *Brady*, *Giglio v. United States*, 405 U.S. 150 (1972) and *United States v. Bagley*, 473 U.S. 667 (1985), and

imposed on the prosecution "the duty to learn of any favorable evidence known to others acting on the government's behalf in the case, including the police." *Kyles v. Whitley*, 514 U.S. 419 (1995).

112. In order to establish a violation of the principles of *Brady* and its progeny, and thus a Due Process and Fair Trial violation of the Fifth and Fourteenth Amendments, Mr. Peterson must establish that: (1) evidence was withheld by the State; (2) the evidence was favorable to Mr. Peterson either because it was exculpatory on the issue of his guilt or provided grounds for the impeachment of a witness; and (3) the withheld evidence was "material."

113. In *Kyles*, the Supreme Court discussed the question of materiality at length. For purposes of measuring a *Brady* violation, "a showing of materiality," wrote the Supreme Court, "does not require demonstration by a preponderance that disclosure of the suppressed evidence would have resulted ultimately in the defendant's acquittal (whether based on the presence of reasonable doubt or acceptance of an explanation for the crime that does not inculcate the defendant)." 514 U.S. at 434. A defendant "need not demonstrate that after discounting the inculpatory evidence in light of the undisclosed evidence there would not have been enough left to convict." 514 U.S. at 434-35. Rather, the "touchstone of materiality is a 'reasonable probability' of a different result. . . . The question is not whether the defendant would more likely than not have received a different verdict with the evidence, but whether in its absence he received a fair trial, understood as a trial resulting in a verdict worthy of confidence." 514 U.S. at 434.

114. Finally, materiality is to be considered in light of the totality of the

suppressed evidence, not item by item. *Kyles*, 514 U.S. at 436; *State v. Canady*, 355 N.C. 242, 252 (2002).

115. Evidence concerning SA Deaver's material misrepresentations as to his education, knowledge, training and experience was both evidence that impeached SA Deaver and was evidence that went to Mr. Peterson's guilt or innocence, since SA Deaver was the only witness for the State that testified as to a specific scientific connection between Kathleen Peterson's death and Mr. Peterson.

116. Evidence concerning SA Deaver's bias was both evidence that impeached SA Deaver and was evidence that went to Mr. Peterson's guilt or innocence, since SA Deaver was the only witness for the State that testified as to a specific scientific connection between Kathleen Peterson's death and Mr. Peterson.

117. Evidence concerning SA Deaver's material misrepresentations as to the scientific basis and acceptability of his opinions, methods and experiments was both evidence that impeached SA Deaver and was evidence that went to Mr. Peterson's guilt or innocence, since SA Deaver was the only witness for the State that testified as to a specific scientific connection between Kathleen Peterson's death and Mr. Peterson.

118. Had this evidence been provided by the State to Mr. Peterson, this Court Finds and concludes that there was a reasonable probability of a different result as discussed in the *Kyles* case discussed above.

119. Because this evidence was not provided by the State to Mr. Peterson in a manner that allowed his counsel to make effective use of , this Court finds and

concludes that Mr. Peterson did not receive a fair trial and that the verdict that resulted from his trial is not worthy of confidence.

120. It is not necessary that the District Attorney had actual knowledge of SA Deaver's false, misleading and fabricated testimony. The State is nonetheless responsible for the failure of any of its agents to disclose exculpatory or impeaching evidence in its possession. The State's failure to do so deprived Mr. Peterson of his constitutional right to Due Process and to a Fair Trial under the Fifth and Fourteenth Amendments.

121. SA Deaver's testimony concerning his education, his knowledge, his training and his experience, was materially misleading and deliberately false.

122. SA Deaver's testimony concerning his lack of bias was materially misleading and deliberately false.

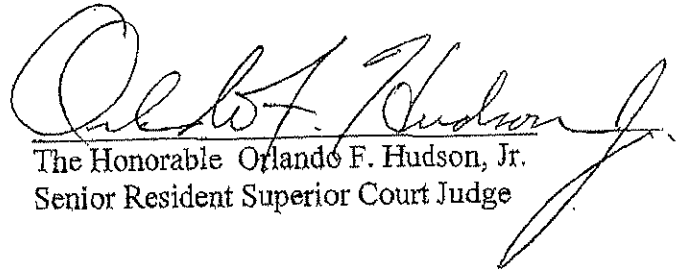
123. SA Deaver's testimony concerning the scientific basis and acceptability of his opinions, methods and experiments was materially misleading and deliberately false.

124. Each of the *Brady* violations outlined within the body of this order individually and cumulatively constitutes a violation of the United States Constitution that warrants that the conviction of Mr. Peterson be vacated and a new trial granted.

Based upon the foregoing findings of fact and conclusions of law, and pursuant to G.S. §15A-1415(b)(3), and the Fifth and Fourteenth Amendment to the United States Constitution, this Court finds and concludes that Mr. Peterson's conviction was obtained in violation of the Constitution of the United States.

Consequently, IT IS HEREBY ORDERED, ADJUDGED and DECREED that Mr. Peterson's conviction be and is hereby VACATED.

This the <sup>9<sup>th</sup></sup> day of May, 2012.

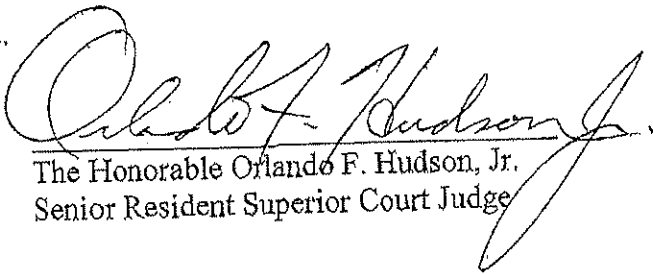


The Honorable Orlando F. Hudson, Jr.  
Senior Resident Superior Court Judge

CERTIFICATE OF SERVICE

I hereby certify that I have served the Attached Order Vacating the Conviction of Michael Peterson on the Office of the District Attorney for the Fourteenth Prosecutorial District, Robert Montgomery of the Attorney General's Office, David Rudolph, Esq. and Kerry Sutton, Esq. A copy of the same order has been filed with the Clerk of Court or his designee by delivering a copy of the same to the persons in charge of their offices on the fifth floor of the Durham County Judicial Building on the date indicated below.

This the 9<sup>th</sup> date of May, 2012.

  
The Honorable Orlando F. Hudson, Jr.  
Senior Resident Superior Court Judge