

IN THE SUPREME COURT OF FLORIDA

GERALD D. MURRAY,)
))
 Appellant,))
vs.)) CASE NO.: 95,470
))
STATE OF FLORIDA,))
))
 Appellee.))
_____)

ON APPEAL FROM THE CIRCUIT COURT
OF THE FOURTH JUDICIAL CIRCUIT,
IN AND FOR DUVAL COUNTY, FLORIDA

INITIAL BRIEF OF APPELLANT

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IN THE SUPREME COURT
OF FLORIDA

CASE NO.: 95,470

GERALD D. MURRAY,
Appellant,

vs.

STATE OF FLORIDA,
Appellee.

PRELIMINARY STATEMENT

Appellant, Gerald D. Murray, will be referred to herein by name, as "Defendant" or as "Appellant." Appellee, State of Florida, will be referred to herein as the "State" or "Appellee." References to the Record on Appeal will be designated by the symbol "R", reference to the transcripts will by the symbol "T" and reference to relevant

volume and page set forth in brackets. Example, (Vol. I, 1).

TABLE OF CONTENTS

TABLE OF CONTENTS i

TABLE OF CITATIONS iii

PRELIMINARY STATEMENT 1

STATEMENT OF THE CASE AND OF THE FACTS2-9

POINTS OF APPEAL10-11

SUMMARY OF THE ARGUMENT12-13

ISSUE I14-23

THE TRIAL COURT ERRED BY PERMITTING THE ADMISSION
 OF HAIR EVIDENCE RELATING TO SLIDE Q42, DESPITE
 INDICATIONS OF PROBABLE TAMPERING OR ALTERING.

ISSUE II 24-28

THE TRIAL COURT ERRED BY PERMITTING THE
 ADMISSION OF HAIR EVIDENCE RELATING TO
 SLIDE Q20, DESPITE INDICATIONS OF PROBABLE
 TAMPERING OR ALTERING.

ISSUE III 28-31

THE TRIAL COURT ERRED BY PRECLUDING DEFENDANT FROM INTRODUCING EVIDENCE OF POTENTIAL WITNESS TAMPERING ON THE PART OF THE STATE'S EXPERT WITNESS, AT THE FRYE HEARING, AS WELL AS BY PRECLUDING THE DEFENSE FROM CROSS-EXAMINING THE STATE'S WITNESS ON THE ISSUE AT TRIAL.

ISSUE IV 32-86

THE TRIAL COURT ERRED IN ADMITTING RESULTS OF DNA TESTING OVER REPEATED OBJECTIONS OF DEFENSE COUNSEL, WHEN ACCEPTED DNA TESTING PROCEDURES WERE GROSSLY VIOLATED, RENDERING THE SUBJECT DNA ANALYSIS NOT IN COMPLIANCE WITH THE REQUIREMENTS OF FRYE V. UNITED STATES.

ISSUE V 86-90

THE TRIAL COURT COMMITTED REVERSIBLE ERROR BY ALLOWING THE STATE TO INTRODUCE EVIDENCE REGARDING MR. MURRAY'S COLLATERAL CRIMES TO DEMONSTRATE BAD CHARACTER OR PROPENSITY TO COMMIT BAD ACTS.

ISSUE VI 90-93

THE TRIAL COURT ERRED IN DENYING DEFENDANT'S MOTION TO EXCLUDE ANY AND ALL HAIR EVIDENCE DUE TO ITS

DESTRUCTION BY THE STATE OF FLORIDA.

ISSUE VII 93-94

THE EVIDENCE WAS INSUFFICIENT TO CONVICT GERALD
MURRAY OF THE OFFENSES CHARGED.

ISSUE VIII 94-96

THE TRIAL COURT ERRED WHEN IT DENIED DEFENDANT’S MOTION
TO COMPEL NAMES OF ATTORNEYS INVOLVED IN DNA CASES
ANALYZED ON GEL LOADING WORKSHEET.

ISSUE IX 97-99

THE TRIAL COURT ERRED WHEN IT DENIED DEFENDANT’S
MOTION
TO SUPPRESS DEFENDANT’S STATEMENTS.

CONCLUSION 100

TABLE OF CITATIONS

<u>Cases</u>	<u>Page(s)</u>
<u>Armbruster v. State</u> , 453 So. 2d 833 (Fla. 4 th DCA 1984).	14
<u>Brim v. State</u> , 695 So. 2d 268 (Fla. 1997).	83
	85
<u>Castro v. State</u> , 547 So. 2d 111, 114 (Fla. 1989)	87
	88, 89
<u>Ciccarelli v. State</u> , 531 So. 2d 129 132 (Fla. 1988)	89

Coxwell v. State, 361 So. 2d 148 (Fla. 1978) 31

Cridland v. State, 693 So. 2d 720 (Fla. 3rd DCA 1989) 21

22

Cyubak v. State, 570 So. 925, 928 (Fla. 1990)87

88

Dodd v. State. 537 So. 626 (Fla. 3rd DCA 1989)20

Frye v. United States, 293 F. 1013, 1014 (D.C. Cir. 1923) . . . 7

10, 11, 12, 28, 29, 32, 33, 43, 48, 52, 73, 77, 78, 79, 83, 84, 85

Garcia v. State, 721 So. 2d 1248 (Fla. 3rd DCA 1998)22

Hair v. State, 428 So. 2d 965, 966 (Fla. 2nd DCA 1982)29

Hall v. State, 403 So. 2d 1321 (Fla. 1981) 87

Hayes v. State, 660 So. 2d 218, 220 (Fla. 1995)34

66, 67, 77, 78, 79, 80, 82

Heiney v. State, 477 So. 2d 210,213 (Fla. 1984)87

Helton v. State, 424 So. 2d 137 (Fla. 1st DCA 1982) 14

Henyard v. State, 689 So. 2d 239 (Fla. 1996) 81

82

Hortsman v. State, 530 So. 2d 368, 370 (Fla. 1988) 94

Jackson v. State, 403 So. 2d 1063 (Fla 4th DCA 1981)89

Lindsey v. People, 892 P. 2d 281 (Colo. 1995)34

Mendez v. State, 412 So. 2d 965, 966 (Fla. 2nd DCA 1982)29

Murray v. State, 692 So. 2d 157, 160 (Fla. 1997) 13

16, 28, 33, 82, 84, 97, 99

Owen v. State, 432 So. 2d 579, 581 (Fla. 2nd DCA 1983) 94

Paul v. State, 340 So. 2d 1249, 1250 (Fla. 3rd DCA 1976)89

Peek v. State, 395 So. 2d 492 (Fla. 1981) 14

78, 88

Ruffin v. State, 397 So. 2d 277, 279 (Fla. 1981) 87

State v. DiGuilio, 491 So. 2d 1129 (Fla. 1986) 89

State v. Norris, 168 So. 2d 541 (Fla. 1964) 88

Straight v. State, 397 So. 2d 903 (Fla. 1981) 89

Taylor v. State, 630 So. 2d 1038 (Fla. 1993) 16

97

Williams v. State, 110 So. 2d 654 (Fla. 1959) 87

89

Wood v. State, 654 So. 2d 218, 220 (Fla. 1st DCA 1995)31

Statutes and Rules Page(s)

Section 90.403, Fla. Stat. (1999)23

Section 90.404(2)(a), Fla. Stat. (1999)86

Section 918.13, Fla. Stat. (1999) 23

Miscellaneous Page(s)

Ehrhardt, Florida Evidence Section 608.5(2000) pg. 457 30

Nat'l Academy Press 1996, DNA Technology in Forensic Science, pg. 70 Nat'l

Research Council 35

36, 37, 38, 62, 80

STATEMENT OF THE CASE AND FACTS

On September 15, 1990, the Appellant/Defendant, Gerald Murray, and his neighbor, James Fisher, picked up Steven Taylor and drove to the Corner Pocket on San Jose Boulevard in Jacksonville, Florida. (Vol.30, P.730-734). Afterwards, Mr. Fisher dropped off Mr. Murray and Mr. Taylor at the corner of Deeder and Herdon Streets, near Mr. Murray's home. (Vol.30, P.735-740).

On September 16, 1990, the Jacksonville Sheriff's Office was contacted after neighbors of Ms. Vest had found her dead in her mobile home, which was uncharacteristically in disarray. (Vol.28, P.481-483). Jacksonville Sheriff's Office evidence technicians took photographs and collected physical evidence on September 16 and 18, 1990. (Vol.28, P.505-507). At the scene of the alleged crime, pruning shears were found lying beneath cut telephone wires. (Vol.28, P.509). Ms. Vest was found lying on her bed with a wire or cord wrapped around her neck. (Vol.28, P.510-511). She had slice wounds and puncture wounds about her upper body. (Vol.28, P.511). Other evidence seized from Ms. Vest's bedroom included a metal bar, a broken bottle, a paring knife, a brass candelabra, a pair of scissors and a web belt. (Vol.28, P.512,513,540-543).

At Trial Jacksonville Sheriff Officer Laforte testified that he collected a bottle of hand lotion and a white garment (nightie, rag) from the sink of the master bathroom and placed both items in a paper bag, and sealed it with evidence tape. LaForte testified that because he found the items together, he wanted to keep together for continuity. (Vol. 29, P.560). LaForte also testified that the lotion bottle were placed in the same paper bag, and not a plastic bag, because plastic promotes the growth of mold and mildew and destroys evidence. (Vol.29, P.584).

Evidence Technician Chase testified at trial that he collected two hairs from the body of the deceased. He packaged them together and sealed the bag. (Vol.30, P.718-722).

Approximately five months later, on February 15, 1991, Detective T.C. O'Steen contacted Assistant State Attorney Bernardo de la Rionda to obtain a search warrant regarding Mr. Murray. (Vol.30, P.853-855). Detective O'Steen's affidavit, in regard to Mr. Murray, stated that Mr. Murray, with James Fisher, picked up Steve N. Taylor at a house where a pendant and English gold coin were found buried in the backyard. (Vol.30, P.820-822). The pendant and coin were alleged to have been missing from Ms. Vest's home. (Vol.30, P.820-822). Also, Detective O'Steen stated in his affidavit that Mr. Murray and Steven Taylor left town a few days after Ms. Vest's death. (Vol.30, P.820-822). Detective O'Steen requested approval to take blood and saliva samples of Mr. Murray. (Vol.30, P.820-822). Circuit Judge Santora issued the search warrant permitting the taking of blood, saliva, and hair samples. (Vol.30, P.820-822).

Subsequently, on February 15, 1991, Mr. Murray, who was incarcerated at

Montgomery Correctional Center on an unrelated offense, was transported to the Police Memorial Building where he was questioned by Jacksonville Sheriff's Office personnel. (Vol.30, P.855-857). Detective O'Steen requested Mr. Murray's consent for blood, saliva, and hair samples. (Vol.30, P.855-857). According to the detective, Mr. Murray acquiesced. (Vol.30, P.855-857). Mr. Murray was taken to the clinic of the Duval County Jail whereupon Mr. Murray learned that samples were to be taken. (Vol.30, P.855-857). Mr. Murray asked to see a search warrant which Detective O'Steen produced, at which point the samples were taken. (Vol.30, P.851-857). Blood, saliva and hair samples were all collected. (Vol.30, P.855-857). Detective O'Steen later testified that he had received consent and a search warrant prior to collecting the samples. (Vol.30, P.855-857).

On December 9, 1998, Mr. Murray moved to exclude novel scientific evidence in the form of DNA testing on his hair samples. (R. 595-598). The trial court denied that motion at trial.

Mr. Murray also moved on October 15, 1998, to exclude the testimony of Joseph A. Dizinno, a hair and fiber examination expert, on the basis that his comparison of Mr. Murray's hairs to hairs found at the crime scene was irrelevant, as it failed to determine any degree of probability or certainty. (Vol. 3, P.580). The trial court likewise denied this motion.

At trial, during the State's presentation of its case, Dr. Bonafacio Floro testified as an expert that Ms. Vest's death was a homicide caused by ligature strangulation and multiple stab wounds. (Vol. 29, P.615). Dr. Floro testified that Ms. Vest had bruising

and abrasions on her breast and stab wounds on her chest, abdomen, back and thigh. (Vol. 29, P. 616). Dr. Floro stated that, in his opinion, the stab wounds were inflicted before the strangulation. (Vol. 29, P.647). Ms. Vest had a lacerated and broken jaw consistent with being hit with a broken bottle neck. (Vol. 29, P.649-651). Dr. Floro, upon being given a hypothetical by the State, also stated that the evidence was consistent with Ms. Vest having been strangled with three objects; a web belt, a leather belt and a cord. (Vol. 29, P.649-651). Upon cross-examination, Dr. Floro was unsure as to how many individuals participated in the strangling. While he had testified at a previous trial that only one knife was utilized, at this trial he indicated scissors were used as well. (Vol.29, P.651)(Vol.30, P.700-701). Dr. Floro also testified that Ms. Vest suffered no defensive wounds, and that the medical evidence was consistent with her having been unconscious from near the outset of her attack. (Vol.29, P.693).

John Wilson, a crime laboratory analyst with FDLE, testified that no identifiable fingerprints were found of Mr. Murray on any of the evidence seized. (Vol. 31, P.883).

The State called Diane Hanson, a forensic serologist with the Florida Department of Law Enforcement. (Vol. 31, 948-949). She stated that seminal stains found on the victim's blouse and bed comforter were consistent with Steven Taylor but not with Mr. Murray. (Vol. 31, 952,966,967). Hanson testified that when she received the bag that contained the "white garment" she did not open it. (Vol. 31, 968) She marked the bag and forwarded it to Katherine Warniment. Hanson testified that when she received the "white garment" back from Warniment she tested it for blood and seminal stains and that neither were identified. Indeed, Mr. Murray was eliminated as a donor of all blood

and semen samplings found by Ms. Hanson. (Vol.31, P.968, 971-973).

Katherine Warniment in the micro-analysis section of F.D.L.E. testified that on October 16, 1990, Dianne Hanson delivered six sealed items to her section. One of the six sealed items contained the “white garment”. It was in a folded, stapled, sealed brown paper bag. When Hanson opened the sealed bag there was no bottle of lotion inside. She never received a lotion bottle. (Vol.31, P.902-906,918-919). When Hanson opened the sealed bag containing the white garment that Evidence Technician, LaForte had packaged, the garment was inside a plastic bag within the paper bag. Hanson inspected the white garment for the presence of trace evidence. Hair was discovered on the garment and those hairs were later forwarded for testing.

Joseph Dizinno, a hair and fiber expert for the FBI, testified, over objection, that a caucasian pubic hair found on the body of the victim had the same microscopic characteristics as the pubic hair of Mr. Murray. (Vol.32, P.1053-1055). Defense counsel objected on the basis that Mr. Dizinno had found more than two hairs in the evidence slide although the evidence technician who had seized the hairs only obtained two. (Vol.32, P.1001-1015). Mr. Dizinno did not count the hairs, but based on his notes he received between five and twenty-one hairs. Mr. Dizinno stated that the comparison of hair did not reveal an absolute positive identification. (Vol.32, P.1055). Mr. Dizinno could not discount the possibility that the hair from the crime scene could have come from someone other than Mr. Murray. (Vol.32, P.1055).

The hair allegedly recovered from the white garment was sent to an unaccredited laboratory, Microdiagnostics, for DNA analysis. Mr. Deguglielmo, the

laboratory director testified that the DNA testing showed the presence of a mixture consistent with that of Vest and Murray. (R.3330).

Anthony Smith, an inmate in the Duval County Jail, who escaped with Mr. Murray on November 22, 1992, testified for the State that Mr. Murray stated he and a friend went to rob a house, had sexual intercourse with the female occupant, stabbed and strangled the woman, and subsequently gathered valuables and left. (Vol.36, P.1645-1648). In exchange for that testimony, the State of Florida waived the death penalty. Mr. Smith pled guilty to first degree murder and was sentenced to life imprisonment with a minimum-mandatory of 25 years. (Vol.36, P.1651).

Following the State's presentation of its case, Mr. Murray through defense counsel, moved for a judgment of acquittal. (Vol.37, P.1750-1756). The motion was denied and the defense began its case. (Vol.37, P.1756-1759).

The defense called Joseph Warren, the laboratory analyst who actually conducted the DNA testing in this case. Mr. Warren was employed by Microdiagnostics as a Laboratory Supervisor and Forensic Scientist (R.4054). Mr. Warren testified at the Frye, hearing that the results from the DNA testing should be deemed inconclusive (R4071). Mr. Warren, stated there were three very good reasons for concluding that the testing was inconclusive. (R4074). Mr. Warren stated that it was embarrassing for him to have to testify about all of the errors he made during the DNA testing in this case. (R.4085). The Microdiagnostics laboratory was not accredited, and was extremely busy at the time of the testing because of a contract with the State of Wisconsin. (R.4086).

Dr. Howard Baum, the Assistant Director of the Forensic Biology Department in the medical examiner's office in New York City was called by the defense. (R. 4164). Dr. Baum testified that Microdiagnostics, through Joseph Warren and Mr. Deguglielmo violated the: NRC recommendations (R.4181) Microdiagnostic's own protocol (R.4233-4247), Perkin Elmer, the manufacturer's directions for the DNA testing kit (R.4255), TWGDAM's guidelines, and the FBI protocol. (R.3904-05).

Dr. Baum testified that if the analyst who performed the test believed that the test should be deemed inconclusive, it should be deemed inconclusive, because that person conducted the test. Additionally, he testified that the opinion of the actual analyst should be given a lot of weight. (R.4260).

On February 12, 1999 after resting, defense counsel again moved for judgment of acquittal, which was denied. (Vol.39, P.2210-2213). The State and defense counsel made their closing arguments in the guilt phase. (Vol.41, P.2296-2412). The Trial Court instructed the jury. (Vol.41, P.2413-2451). On February 12, 1999, the jury found Mr. Murray guilty of murder in the first degree, burglary, and sexual battery. (Vol.41, P.2452).

On February 22, 1999, Mr. Murray filed a motion for new trial. (Vol.7, P.1236-1242). That motion was denied. (Vol.7, P.1243). On March 8, 1999, the penalty phase of this case began. (Vol.7, P.1246). On February 26,1999 the jury returned a recommendation of death. (Vol. 7, P.1250). On March 19, 1999 the Trial Judge sentenced Defendant to death. (Vol. 7, P.1289-1320).

Mr. Murray timely filed his notice of appeal on April 16, 1999. (Vol. 7, P.1327).

Undersigned appellate counsel was appointed on date needed). This appeal follows.

POINTS ON APPEAL

I.

THE TRIAL COURT ERRED BY PERMITTING THE ADMISSION OF HAIR EVIDENCE RELATING TO SLIDE Q42, DESPITE INDICATIONS OF PROBABLE TAMPERING OR ALTERING.

II.

THE TRIAL COURT ERRED BY PERMITTING THE ADMISSION OF HAIR EVIDENCE RELATING TO SLIDE Q20, DESPITE INDICATIONS OF PROBABLE TAMPERING OR ALTERING.

III.

THE TRIAL COURT ERRED BY PRECLUDING DEFENDANT FROM INTRODUCING EVIDENCE OF POTENTIAL WITNESS TAMPERING BY THE STATE'S EXPERT WITNESS. AT THE FRYE HEARING AS WELL AS BY PRECLUDING THE DEFENSE FROM CROSS-EXAMINING THE STATES WITNESS ON THE ISSUE.

IV.

THE TRIAL COURT ERRED IN ADMITTING EVIDENCE OF DNA TESTING OVER REPEATED OBJECTIONS OF DEFENSE COUNSEL, WHEN ACCEPTED DNA TESTING PROCEDURES WERE GROSSLY VIOLATED, RENDERING THE SUBJECT DNA ANALYSIS NOT IN COMPLIANCE WITH THE REQUIREMENTS OF FRYE V. UNITED STATES.

V.

THE TRIAL COURT COMMITTED REVERSIBLE ERROR BY ALLOWING THE STATE TO INTRODUCE EVIDENCE REGARDING MR. MURRAY'S COLLATERAL CRIMES TO SHOW BAD CHARACTER OR PROPENSITY TO COMMIT BAD ACTS.

VI.

THE TRIAL COURT ERRED IN DENYING DEFENDANT'S MOTION TO EXCLUDE ANY AND ALL HAIR EVIDENCE DUE TO ITS DESTRUCTION BY THE STATE OF FLORIDA IN VIOLATION OF THE TRIAL COURT'S ORDER.

VII.

THE EVIDENCE WAS INSUFFICIENT TO CONVICT GERALD MURRAY OF THE OFFENSES CHARGED.

VIII.

THE TRIAL COURT ERRED WHEN IT DENIED DEFENDANT'S MOTION TO COMPEL NAMES OF ATTORNEYS INVOLVED IN DNA CASES ANALYZED ON GEL LOADING WORKSHEET.

IX.

THE TRIAL COURT ERRED WHEN IT DENIED DEFENDANT'S MOTION TO SUPPRESS DEFENDANT'S STATEMENTS.

SUMMARY OF THE ARGUMENT

1. The Trial Court erred by permitting the admission of hair evidence relating to slide Q42, despite indications of probable tampering or altering.
2. The Trial Court erred by permitting the Admission of hair evidence relating to slide Q20, despite indications of probable tampering or altering.
3. The Trial Court erred in precluding Defendant from introducing evidence of potential Witness tampering by the State's expert Witness, at the Frye hearing as well as by precluding the defense from cross-examining the State's witness on the issue at Trial.
4. The Trial Court erred in admitting evidence of DNA testing over repeated objections of defense counsel, when accepted DNA testing procedures in the scientific community were grossly violated, rendering the subject

DNA analysis not in compliance with the requirements of Frye v. United States, 293 F. 1013, 1014 (D.C. Cir. 1923).

5. The Trial Court committed reversible error by allowing the State to introduce evidence regarding Mr. Murray's collateral crimes to demonstrate bad character or propensity to commit bad acts.
6. The Trial Court erred in denying Defendant's motion to exclude any and all hair evidence due to its destruction by the State of Florida. At the prior trial court, Honorable Judge Stetson, stated on the Record on August 27, 1997 "Okay we have addressed this previously. The Court Ordered, at the request of the Defendant, that the State require the expert that he uses as little of it as reasonably possible and try to preserve whatever surplus may remain."
7. The evidence was insufficient to convict Gerald Murray of the offenses charged.
8. The Trial Court erred when it denied Defendant's Motion to Compel names of attorneys. On January 12, 1999, Defendant filed a Motion to Compel Names of Attorneys involved in DNA cases analyzed on gel loading worksheet 97-279. (R. 715).
9. The Trial Court erred when it adopted the prior Court's rulings denying Defendant's Motion to Suppress Defendant's statements. The statements stem from an interview with the lead Detective, T.C. O'Steen and Murray. During that interview Murray was told that DNA found at the scene

matched him. That DNA was later ruled inadmissible by this Court in Murray v. State, 692 So. 2d 157, (Fla. 1997).

ARGUMENT

I.

THE TRIAL COURT ERRED BY PERMITTING THE ADMISSION OF HAIR EVIDENCE RELATING TO SLIDE Q42, DESPITE INDICATIONS OF PROBABLE TAMPERING OR ALTERING.

The Trial Court committed reversal error by applying the wrong standard while continuing to deny Defendant's Motion to Suppress Hair Evidence Due to Probable Tampering. It is clear that the Court applied the wrong standard because, when discussing the motions to suppress the Court emphatically stated "[a]nd they'll remain denied until you can show me something proof positive." (Vol.32, P.1086-87, L.24-1)(emphasis added). The Court clearly appeared confused on the standard and at one point stated "... but I haven't seen any demonstrative evidence or probable likelihood of tampering." (Vol 32, P.1084) (emphasis added). The Trial Court misinterpreted the prevailing case law in this area and at one point stated "... I've seen a lot of suspicion but I haven't seen proof of likelihood (sic) of probability of tampering." (Vol.32, P.1088, L.23-25) (emphasis added).

The law in the State of Florida is clear that potentially relevant physical evidence

is inadmissible when there is an indication of probable tampering. Peek vs. State, 395 So.2d 492 (Fla. 1981) (emphasis supplied); Helton vs. State, 424 So.2d 137 (Fla. 1st DCA 1982); Armbruster vs. State, 453 So.2d 833 (Fla 4th DCA 1984). The standard is not “proof positive”, and the defense is not required to present “demonstrative evidence.”

In the instant case, it is beyond dispute that the Defendant established the probability that the “hair evidence” was tampered with. On September 16, 1990, Jacksonville Sheriff’s Office Evidence Technician, David Chase, collected two single hairs from Ms. Alice Vest’s body. (Vol.30, P.718, 722). One hair was found on Ms. Vest’s left leg, and the other was found on her chest. (Vol.30, P.718). Officer Chase collected the two single hairs with tweezers and placed them in a manila envelope, which was then placed in the evidence room at the Jacksonville Sheriff’s Office. (Vol. 30, P.720-721).

The hairs were tested at another facility by Joseph Dizinno, a hair and fiber expert for the Federal Bureau of Investigation. Dizinno testified at trial that when he tested this evidence, he found *several* Caucasian head hairs, *several* Caucasian body hairs, and **a** Caucasian pubic hair. (Vol. 32, P.1061, 1068) (emphasis added). At trial, Mr. Dizinno was asked how many hairs were taken off of the body of the deceased. Mr. Dizinno responded, “[i]n my notes there are two places where it says several, and one place where it says one. Several to me means in my notes 2 to 10. We don’t count hairs so anywhere - - there could be as few as five and as many as twenty-one, but we don’t count hairs.” (Vol.32, P.1070) (emphasis added).

The inquiry continued:

Q. So, Doctor, in your estimation, approximately how many hairs, if you can, did you receive under Q-42?

A. Again, it could be as few as five, if you count 2 for each several, 2 for the Caucasian head hairs, 2 for the body hairs and fragments and one for the pubic hair, that would be five, or it could be as many as 21 if there were ten of the head hairs, ten of the body hairs and fragments, and one pubic hair. I don't know the exact number, though.

(Vol.32, P.1072, L1-10)(emphasis added).

This obvious, and crucial, discrepancy between the two single hairs which were collected by Evidence Technician Chase, and the number of hairs tested by Mr. Dizinno (between five and twenty-one hairs) is most crucial in this case, based on the fact that this "hair evidence" is *the only physical evidence whatsoever* which allegedly links the Defendant to this crime. On the other hand, there was substantial physical evidence linking others to this crime. see Taylor v. State, 630 So. 2d 1038 (Fla.1993). As for Gerald Murray, there were no finger prints, there was no blood evidence, there was no semen evidence, and the record is replete with the substantial number of items which the State claimed were used as weapons against Ms. Vest. The State's best forensic investigators found zero physical evidence relating to Gerald Murray on any of the alleged weapons. Therefore, this "hair evidence" is in effect the State's entire case against Mr. Murray. Without the hair evidence, there literally is no case. This Court previously noted, that "Murray was eliminated as the donor of all the other seminal and blood stains found at the crime scene." Murray v. State, 692 So. 2d 157,160 (Fla. 1997).

The probability that the hair evidence was tampered with was further established by the testimony of the State's own witness, Mr. Dizinno. Mr. Dizinno testified that when he received the hair evidence which had allegedly been collected by Evidence Technician Chase, it was provided to the FBI in the same sealed box as the known hair samples of Mr. Murray. (Vol.32, P.1042). Restated, the same box contained the known and unknown samples, increasing the probability of tampering, either intentionally or unintentionally. A Defendant is not required to prove that the probable tampering was intentional or unintentional, only that tampering was probable.

The testimony of Mr. Dizinno is as follows:

Q. . . . at that time didn't you also receive a letter describing what was in the box?

A. Let me check my notes (witness examining documents.)

A. We received a communication from our Jacksonville office that doesn't specifically describe the evidence. It says that there were hairs and fibers in - - **in one sealed box containing known hair samples from Taylor and Murray and questioned hair samples recovered from the crime scene.**

(Vol.32, P.1074, L17-23) (emphasis added).

Accordingly, the Defendant established that the evidence containing the hairs allegedly retrieved from the decedent's body were provided for testing in the exact same box as specimens of known hairs from the Defendant, therefore, increasing the likelihood of tampering. In addition, the evidence technician who collected the hairs from the decedent's body clearly testified that he only collected two single hairs. The FBI agent analyzing the hairs clearly testified there were "between five and twenty-

one” hairs. The only possible way that two single hairs can become between five and twenty-one hairs is through tampering. Accordingly, the State must meet its burden of producing all relevant witnesses in the chain of custody. If that is done, the State must then sufficiently explain away the reasonable concern of tampering. The State did neither.

As to the crucial witnesses in the subject chain of custody, the Defendant established there were such witnesses the State neglected to call. When Mr. Dizinno was cross-examined by defense counsel, the exact identity of these indispensable witnesses was ascertained.

Q. So who opened this box when it arrived at your lab?

A. The box was originally opened by - - CB is a symbol for another examiner in the laboratory by the name of Chet Blythe who is now retired. This is a long time ago, but, as I recall it, this case came in with a very short deadline as to when we received the item evidence and when the trial date was, so he never examined the evidence. It was given to me to examine because I at that time could turn it around faster than he could.

Q. So you weren't there when he opened the box?

A. No, I wasn't.

(Vol.32, P.1058,1059, L20-25,1-6).

It is uncontroverted that Mr. Blythe was never called to testify in this case. In addition, not only did Murray establish that a person who performed the critical task of opening this sealed box of crucial evidence that contained Murray's hair and the unknown hairs did not testify (Mr. Blythe), but in addition, another person who mounted this critical evidence was never called.

- Q. Doctor, who mounted those slides?
- A. A technician that works under my direction.
- Q. And would that be, Ms. Blythe or - -
- A. No, it was not. It was not Ms. Blythe - - Mr. Blythe. Actually it was a long time ago and the notes are here. I think it was a woman by the name of Paula Frasier, but I'm not sure about that.
- Q. Wouldn't that be in your notes somewhere on who actually mounted those slides?
- A. No, at the time they did not put their initials on their notes and she was - - as I recall, she was working for me at that time and it looks like her handwriting, but I'm not sure about that.
- Q. Were you present when whoever mounted those slides actually put the hairs on the slide?
- A. I may have been and I may not have been. Just as if I were still in that unit today, there may be a technician who worked with me now who may be back there as I'm testifying mounting slides, so I don't know.

(Vol.32, P.1063, L24-25, P.1064, L1-25, P.1065, L1-4).

The Appellant conclusively established that the hair evidence was tampered with. It is physically impossible that exactly two hairs can become between five and twenty-one hairs. In addition, the Appellant conclusively established that two key law enforcement personnel in the chain of custody of the hair evidence were never called to testify, and no reasonable explanation was provided to explain away the probability of tampering. Accordingly, the State failed to meet both of its burdens, first to provide all of the key custodians in the chain of custody, and then to sufficiently explain away the probable tampering. Even if the State were to call the missing chain of custody

witnesses, they would have to admit tampering, or they do not know how two hairs became between five and twenty-one hairs.

What is further troublesome, is that for some unknown reason, someone crossed out the initials of Chet Blythe, the person who opened the box. Mr. Dizinno testified that it was “probably” him that did so, but that he could not recall. (Vol.32 P.1065-66). Further, this came at a time in which the FBI laboratory was being investigated by the Attorney General’s Office. That investigation specifically involved an employee of the FBI Laboratory, Hair and Fibers Unit. (Vol.32, P.1079). The unit in which these critical hairs were received, mounted and examined. (see: Office of Inspector General U.S. Dept. of Justice, The FBI Laboratory: An investigation into Laboratory Practice and Misconduct).

This tampering issue was analyzed in Dodd vs. State, 537 So.2d 626 (Fla. 3rd DCA 1989), wherein there was a discrepancy as to the weight of the contraband seized. The seizing officer weighed the contraband and its container at 317.5 grams. The same officer transported the container to the FDLE office in Miami, where a contraband scale registered the combined weight at 249.5 grams:

According to his testimony, the officer then put the bags inside a single plastic bag, heat-sealed the bag, and marked the date in his initials on the outside of the bag. The officer used a secure evidence locker to store the contraband until such time as he removed the bag and turned it over to a special agent who was to hand deliver it to the crime lab in Orlando. A chemist from the crime lab testified that a heat-sealed plastic bag was delivered to the lab by the special agent. According to the chemist, the bag showed no markings whatsoever. The contraband, minus its packaging, registered a net weight of 220 grams on the lab scale. **The State did not call the special agent to testify, nor was he listed as a potential witness in the State’s pretrial catalog.** In the course of three redirects, the officer who first seized and secured the contraband managed

to explain some, but not all, of the discrepancies in weight and packaging.

Id. at 627 (emphasis added).

The Court concluded that the conflicting descriptions of the bag and “gross discrepancies” in the recorded weights and packaging details indicated “probable tampering.” The Court noted,

[i]t is plain that the contraband received by the crime lab was *not* in the same condition as was testified to by the officer who seized the contraband. On this record we cannot tell whether the cocaine Dodd sold and the cocaine introduced at trial are one and the same. Thus, it was error for the trial court to admit the cocaine into evidence without first receiving testimony from the special agent that would explain the changes in the condition in the evidence between the time of seizure and the time of trial. Lacking the testimony of the special agent, the State could not establish a sufficient chain of custody for the cocaine to be admitted in evidence against Dodd.

Id. at 628.

This same issue was later addressed in Cridland vs. State, 693 So.2d 720 (Fla 3rd DCA 1997). There, the Court ruled that while the general rule is that the State is not required to elicit testimony from every custodian in the chain, where there is some indication of probable tampering with the evidence, the evidence is inadmissible unless the State can establish a proper chain of custody. Id. at 721.

In Cridland, the court held that, “[i]n this case, the State failed to present testimony from two witnesses who were critical links in the chain of custody. In light of the conflicting evidence as to the quantity of the cocaine seized, the State failed to prove that the cocaine seized and the cocaine introduced at trial were one and the same.” Id. at 720. (emphasis supplied). Likewise, it was clearly established in Murray’s case that indeed two critical witnesses were not called to testify.

This line of authority should be compared to cases in which the probability of tampering was sufficiently explained, so as to render the subject evidence admissible. In Garcia vs. State, 721 So.2d 1248 (Fla 3rd DCA 1998), the Court ruled that cocaine contraband was properly admitted into evidence, despite the discrepancy between the weight of the cocaine recovered by the police and that which was introduced into evidence. In Garcia, **no** independent evidence of tampering existed, and the difference in weights was clearly explained, in that the weight of 22.3 grams referred to the total weight of the envelope, pill case, cocaine, marker, and tape, and the weight of 10.5 grams referred to the weight of the cocaine and the vial in which it was contained, and the weight of 2.6 grams referred to the weight of the cocaine itself, without any packaging.

Therefore, the general rule is that every custodian in the chain of custody need not necessarily be called to testify, unless the Defendant first produces evidence of probable tampering. Once evidence of probable tampering has been introduced, the burden is upon the State to appropriately establish a full chain of custody and, to sufficiently explain away the probability that the evidence was tampered with. If the State cannot meet its burden of establishing the proper chain of custody and explaining away the probable tampering, the evidence is inadmissible as a matter of law.

Exclusion of such evidence is also consistent with Fla. Stat. ch. 918.13, (1999), which establishes that tampering with evidence is a felony of the third degree. Further, exclusion of evidence of this kind is also consistent with the Florida Evidence Code. “Relevant evidence is inadmissible if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of issues, misleading the jury, or needless

presentation of cumulative evidence.” Fla. Stat. ch. 90.403 (1993)(emphasis added). Accordingly, Florida Statutes, the Florida Evidence Code, and applicable case law, all require that when a Defendant establishes the probability that evidence has been tampered with, that evidence is inadmissible, unless the State meets its burden of sufficiently rebutting such evidence.

The Appellant obviously cannot possibly do anything more to establish probable tampering than that which was done in this case. The hair evidence, accordingly, must be ruled inadmissible, and this case reversed. The Trial Court applied the wrong standard, and to hold otherwise would require Defendants to actually find and produce witnesses to admit tampering with the subject evidence in order to exclude it.

II.

THE TRIAL COURT ERRED BY PERMITTING THE ADMISSION OF HAIR EVIDENCE RELATING TO SLIDE Q20, DESPITE INDICATIONS OF PROBABLE TAMPERING OR ALTERING.

Based on the above cited authority, this case should be reversed because of the probability of tampering as to the hairs on slides Q20:B-3 and B-4. Hairs on slides Q20: B-1 through B-5 were recovered from a garment (nightie; rag) found in the victim’s bathroom next to a lotion bottle. These are the subject hairs relevant to Section IV of this Brief regarding the State’s DNA testing. The State of Florida offered expert testimony regarding hairs B-3 and B-4 which were tested for the presence of DNA. The State’s expert testified that the DNA was consistent with a mixture of Gerald

Murray and Alice Vest. Specifically at issue is the seizure of this garment and a lotion bottle found by Officer Michael LaForte, Evidence Technician with the Jacksonville Sheriff's Office. Officer Michael LaForte recovered the garment, and testified on direct examination that:

Q. And the hand lotion and the nightie, were they put inside this bag?

A. Yes, they were.

Q. What was the purpose in putting those items inside this bag, sir?

A. The continuity. They were both found and collected from the same place, I wanted to keep them together.

(Vol. 29, P.560)(emphasis added).

This bag was introduced as State Exhibit GG without objection (Vol. 29, P.560, L8-15), because the discrepancy had not yet been revealed by Ms. Warniment of the Florida Department of Law Enforcement (FDLE). On cross examination, Officer LaForte testified that he put the items in paper “because plastic promotes the growth of mold, mildew and destroys evidence.” (Vol.29, P.584, L2-3.) (emphasis added). Therefore, it is undisputed that both the garment and the lotion bottle were placed in the same bag. Officer LaForte testified that he used a paper bag, and that he would not utilize a plastic bag for the reasons mentioned above.

Katherine Warniment from the Florida Department of Law Enforcement (FDLE) testified that she is employed at the Jacksonville Regional Crime Laboratory as a crime laboratory analyst, currently in the toxicology section, but previously in the micro-analysis section. (Vol. 31, P.902, L21-25). When the time came to open the evidence

bag sealed by Officer Laforte, Ms. Warniment testified that:

A. I never received a plastic lotion bottle. That is what I was trying to say.

Q. Okay.

A. The white garment was within paper bags. It was a double-bag assembly within an outermost bag and I did not receive a plastic bottle of lotion.

(Vol. 31, P.920, L9-16) (emphasis added). Not only was the lotion bottle not present in the previously sealed bag by Mr. Laforte, the garment had clearly been tampered with because Ms. Warniment testified it was,

. . . in a double-bag assembly of two additional layers of plastic bag and there was nothing else in Exhibit No.54. The Vaseline lotion bottle I did not receive myself.

(Vol. 31, P.920, L1-4) (emphasis added). Therefore, Officer Laforte testified that he picked up the garment and the lotion bottle, placed them in the same paper bag, sealed them in paper with no plastic because it destroys evidence. When they were finally opened by Ms. Warniment, the garment had been separated and had been placed in a separate container within the initial bag, and inside a plastic bag that destroys evidence. The lotion bottle was not present. What causes further concern is that Ms. Warniment testified:

It was just the one seal. In trace evidence recovery, it's important to check the items to make certain that they have not been exposed to prior to that procedure, and I did receive that sealed, the seal appears to be intact. I did not see any indications of prior examination, so it appeared to be in good condition to perform that particular examination.

(Vol. 31. P.921,L20, P.922, L2) (emphasis added).

Based on that testimony, it is clear that “someone” tampered with the evidence

by taking the initial bag that Officer Laforte had packaged the items in, destroyed that bag, separated the two items into two separate bags, one of which was the garment of which the five hairs in this case were derived, specifically the two hairs alleged to be a mixture of Gerald Murray and the victim. Additionally, someone placed the “white garment” in a plastic bag contrary to the policy and procedure of Officer Laforte, who testified that he does not put evidence in plastic because plastic promotes the growth of mold, mildew and destroys evidence. (Vol.29, P.585).

When it became apparent that this evidence had been tampered with, Defense counsel renewed the objection and pointed out to the Trial Court that the critical trace evidence from the garment contained the hairs the State was going to offer in its DNA testimony. The Trial Court even noted that the “chain of custody would go to trace evidence.” (Vol.31, P.929). The Court seemed to recognize the problem and stated, “right now it is not a problem, but it may be a problem in the future.” (Vol.31, P.928).

In this instance, the State attempted to explain away this probable tampering by asking Dianne Hanson, a forensic serologist with the FDLE, if she had anything to do with the lotion bottle. However, she testified that she did not have anything to do with any lotion bottle. (Vol.31, P.969). She testified that the same day she received the bag, she forwarded it to Ms. Warniment. (Vol.31, P.968). Moreover, she did not open the bag, but instead merely marked the bag. (Vol.31, P.972).

Because the defense clearly demonstrated the probability of tampering, the hair evidence should be deemed inadmissible and this case reversed. The Trial Court applied the incorrect standard of requiring “demonstrative evidence” or “proof positive,” when the standard is “the probability of tampering.” In so concluding, this

Court need not even address Section IV of this Brief, because any and all DNA testimony discussed in Section IV would be inadmissible under the “Fruit of The Poisonous Tree Doctrine.”

C. The Error Was Harmful.

There can be no sincere contention that the error made by the trial court was harmless. Harmless error occurs when there is no reasonable possibility that the error contributed to the conviction. State v. DiGuilio, 491 So.2d 1129 (Fla. 1986); Murray v. State, 692 So. 2d 157 (Fla. 1997).

The blood, saliva and semen found at the scene in this case were tested and found not to match Mr. Murray. (Vol. 31, p. 967) This hair evidence from slides Q20 and Q42, is the only physical evidence connecting Mr. Murray to the crime scene or to the events surrounding the victim's death, sexual battery and burglary. By no stretch of the imagination can the error of failing to suppress this critical evidence be deemed harmless.

III.

THE TRIAL COURT ERRED BY PRECLUDING DEFENDANT FROM INTRODUCING EVIDENCE OF POTENTIAL WITNESS TAMPERING ON THE PART OF THE STATE’S EXPERT WITNESS, AT THE FRYE HEARING AS WELL AS BY PRECLUDING THE DEFENSE FROM CROSS-EXAMINING THE STATE’S WITNESS ON THE ISSUE AT TRIAL.

During the Frye, hearing, the State’s expert, Mr. Deguglielmo, contacted the

defense expert, Joseph Warren, in an attempt to influence, or alter, the testimony of Mr. Warren. Mr. Deguglielmo testified on behalf of the State at the Frye, hearing. Mr. Deguglielmo's testimony went longer than expected and he was released temporarily due to a scheduling conflict the following day. After Mr. Deguglielmo testified, he placed a phone call to Joseph Warren, the analyst who did the actual testing in this case. During that telephone conversation he attempted to influence the testimony of Mr. Warren.

The Trial Court precluded the Defense from offering direct evidence of such at the Frye, hearing, and precluded the defense from cross-examining Mr. Deguglielmo on that conversation at Trial.(R4080-4082). In doing so the Court committed reversible error. It is well settled that "when a witness takes the stand, he *ipso facto* places his credibility at issue." Mendez v. State, 412 So. 2d 965,966 (Fla 2d DCA 1982) (emphasis theirs). Further, that "a party may elicit facts tending to show bias, motive, prejudice or interest of a witness, a right that is particularly important in criminal cases because 'the jury must know of any improper motives of a prosecuting witness in determining the witness' credibility.'" Hair v. State, 428 So. 2d 760-763 (Fla. 3d DCA 1983) (emphasis supplied).

The testimony from the proffer is as follows:

Q. What did he say to you?

A. The witness Joseph Warren: He - - the first thing he asked was, "You don't keep a phone log, do you?" And I laughed I said, "No, no, we're not keeping a phone log." He said, "when are you going to be in" - - and this is paraphrasing, - - "When are you going to be in town and - - in Jacksonville?" And I said, "Well, it looked like I was going to be in Wednesday but I think it's going to be Thursday." He said,

“I was wondering if we could have lunch together.” And I said, “Well, I’m not going to be there.” He said, “That’s too bad.” He said, “I have been on the stand quite a bit and it has been,” to use his - - to paraphrase, “a challenge, that the defense attorney has been doing - - doing her - - keeping me on the stand quite a while.”

THE COURT: This is true. I’ve been here the whole time.

THE WITNESS: Yes, sir. He said that I should review our deposition - - my deposition, that I should - - he said - - I recall our conversation in - - in - - in - - in Ft. Lauderdale prior to - - the day before your deposition, which we went over those errors, and the last thing he said, “I want you to know that you should not consider Ms. Warren your friend, that she will try to get you to impeach my evidence,” words to this effect, to the best of my memory, “but then get it on the record that you’ve made all these sloppy mistakes and have it both ways.” I said, “Well, she is defending her client, she’s going to give her client the best defense possible.” And that was it. He said, “I hope I see you soon,” and the conversation ended within minutes.

Q. And how did that make you feel?

A. I got the feeling, if I may, that I was to be circumspect in my dealings with you.

(Vol. 22, P.4080-4082) (emphasis supplied).

The Trial Court precluded this testimony from its consideration in determining the weight to be given the testimony of the State’s expert, Mr. Deguglielmo. The trial judge further precluded the defense from cross-examining Mr. Deguglielmo on that conversation at trial. (R4080, L20 through R4082, L16).

It is well settled that the right to cross-examine a critical state witness on the issue of bias or prejudice is very broad, and great latitude should be given. Interest, motive and animus are never collateral matters on cross-examination and are always

proper. Ehrhardt, Florida Evidence Section 608.5, 2000, p.457. This phone call was clearly an attempt by the State's key witness to influence the testimony of Mr. Warren, the man who conducted the DNA testing. Also, it clearly shows the witness had a personal interest in the case beyond that which the jury perceived. It is well established that the denial of the full right of cross-examination is harmful and fatal error. Coxwell v. State, 361 So. 2d 148 (Fla. 1978).

Of utmost importance is that the State of Florida did not choose to call Mr. Warren, the lab analyst who actually conducted the DNA testing. The Defense called Mr. Warren to testify, and he unequivocally testified that the test should be deemed inconclusive. (Vol. 39, P.2096-2105). Mr. Deguglielmo was clearly worried that Mr. Warren would "impeach his evidence", and was looking to Mr. Warren for assistance in being "circumspect" in his dealings with defense counsel, as well as, with the Court.

"Because appellant's proffered testimony was relevant to this defense, the trial court abused its discretion by disallowing same." Wood v. State, 654 So. 2d 218, 220 (Fla. 1st DCA 1995). The error cannot be considered harmless because it went directly to impeach the credibility, or reveal the bias, of a crucial State witness. Therefore, the case must be reversed and remanded for new trial.

IV.

THE TRIAL COURT ERRED IN ADMITTING EVIDENCE OF DNA TESTING OVER REPEATED OBJECTIONS OF DEFENSE COUNSEL, WHEN ACCEPTED DNA TESTING PROCEDURES WERE GROSSLY VIOLATED, RENDERING THE SUBJECT DNA ANALYSIS NOT IN COMPLIANCE WITH THE REQUIREMENTS OF FRYE V. UNITED STATES.

The Trial Court in this case erred in the exact manner in which other trial courts have been reversed when attempting to determine the admissibility of DNA evidence. The Trial Court ruled that the discrepancies and failures to follow appropriate protocols in the Scientific Community is something that the defense is free to argue to the jury. (Order,P.2-3). Therefore, the Trial Court impermissibly ruled it was a matter of weight, not admissibility. This Court stated in Defendant, Murray's first appeal that:

[t]he burden is on the proponent of the evidence to prove the general acceptance of both the underlying scientific principle and the testing procedures used to apply that principle to the facts of the case at hand. The trial judge has the sole responsibility to determine this question.

Murray, 692 So. 2d 157,161 (Fla. 1997) (emphasis supplied). The Trial Court did not make the determination that the State satisfied the general acceptance in the “scientific community” in its Order. The results of the DNA test in this case are unreliable, inconclusive, and therefore, this case should be reversed. After an extensive five day Frye hearing which included dozens of scientific exhibits and testimony of five scientific expert witnesses, the conclusions were apparent. The procedures used in the actual testing of this DNA did not comply with the accepted protocols to ensure

reliability. Critical steps were omitted, and such critical steps are mandated by the entire scientific community before the results can be reported.

In addition to ignoring numerous critical safeguards, there were blatant and gross violations of the appropriate procedures and protocols required to carry out critical steps of the analysis, steps that are critical to ensure an accurate result. The evidence adduced at the Frye Hearing and at trial demonstrated that appropriate documentation and photographs were missing, and digitized print-outs had been manipulated to omit information, and possibly to give false readings.

The numerous gross and flagrant violations of the acceptable standards in the scientific community can best be explained by dividing them into six areas: First, the lack of an independent review by a second qualified analyst to protect against bias; Second, the lack of substrate shaft control used to protect against contamination; Third, the absence of critical documentation necessary to provide an independent review to ensure the absence of contamination; Fourth, the manipulation of the digitized printouts of the evidence by the State's expert; Fifth, the violations of the instructions that came with the DNA testing kit by the manufacturer, Perkin Elmer; Sixth, Microdiagnostics violated their own protocols.

In reviewing admissibility, this Court should carry out a limited de novo review looking to the evidence offered below and looking to scientific literature, commentaries and case law which reflected, or reflect back on, scientific acceptance at the time of the hearing. Hayes v. State, 660 So. 2d 257 (Fla. 1995), (recognizing DNA technology is "constantly changing" finding State had not proven general acceptance after reviewing trial testimony and the NRC Report); Lindsey v. People, 892 P.2d 281 (Colo. 1995),

(en banc) (holding reviewing court must determine "whether novel scientific evidence was generally accepted in the relevant scientific communities at the time it was offered into evidence at trial").

The Defendant called Dr. Howard Baum who is employed at the office of Chief Medical Examiner, New York City, New York. Dr. Baum is the Assistant Director of the Forensic Biology Department in the Medical Examiner's office in New York City. Dr. Baum is responsible for processing homicide casework, sexual assault casework, and selected robberies and burglaries for the City of New York. Additionally, he is also responsible for new methods of validation for research. Dr. Baum supervises fifteen people and reviews six to seven hundred cases a year that involve DNA testing. Dr. Baum is involved in the drafting of the protocols that are involved in PCR DNA analysis for the City of New York. Dr. Baum was accepted by the trial court as an expert in the field of forensic biology, specifically dealing with DNA testing. Dr. Baum stated that he has testified twenty-one times, and twenty of those, had been for the prosecution. (R.4170). Dr. Baum testified the results are inconclusive and unreliable for numerous reasons. (R4164).

Most importantly, the Defense also called Joseph Warren, the lab analyst who conducted the DNA testing in this case. Mr. Warren testified that the results should be deemed inconclusive for three reasons: First, because of the lack of controls, especially the lack of a substrate shaft control; Second, the difference in interpretations of the fainter amping alleles and; Third, the lack of an independent review by a qualified analyst. (Vol. 39, P.2096-2105).

I. ANALYST BIAS AND THE NEED FOR AN INDEPENDENT REVIEW

An independent review by a second qualified analyst is critical to avoid analyst bias. The appropriate procedure when conducting DNA testing pursuant to the NRC recommendations is that the analyst doing the testing maintain his notes and maintain his worksheets, therefore, allowing for the required independent review. An independent analyst will then go through the exact same steps that the first analyst conducted, and he maintains his own notes and worksheets. National Research Council, DNA Technology in Forensic Science, pg. 70 (Nat'l Academy Press 1996).

At the conclusion, the two analysts consult, and if they are in agreement, the results are reported out. If they are not in agreement, they are to consult with one another to determine if they can resolve the differences noted. If they are able to resolve the differences, and are able to agree, the results are reported out. If they are unable to agree, the test is deemed inconclusive, therefore unreliable, and it is not reported out. (NRC citing TWGDAM and ASCLD-LAB).

Dr. Baum testified as to why it is apparent through the records, documents and photographs that were supplied by Microdiagnostics that there was no independent review done in this case. While explaining the reasons for the determination that there was no independent review, Dr. Baum pointed out for the Trial Court the gross errors and violations in procedures that would, in and of themselves, render the results inadmissible even if there had there been an independent review by a second qualified analyst.

The NRC II discusses potential analyst bias and indicates that:

Possibly exculpatory evidence might be ignored or rejected. Contradictory test results or evidence of sample mixture may be discounted. Such bias is relatively easy to detect if test results are reviewed critically. Both TWGDAM and ASCLD-LAB accreditation guidelines stipulate that case files be reviewed internally by a qualified second analyst before a report is released. That not only reveals bias but also reveals mistakes in recording and oversights. Independent review by a defense expert provides even stronger protection against the possibility that bias will lead to a false match. This is most effective if the defense expert is thoroughly familiar with the standard procedures of the testing laboratories so that exceptions from standard can be noted.

It has been argued that when the analyst of a test result involves subjective judgment, expectations or other biases can influence an analyst's interpretation (Nisbett and Ross DOR, 1980). For example, it has been suggested that analysts examining DNTR autoradiographs sometimes interpret pink bands as real or artificial so as to produce match with the subject's profile

NRC II. at 85.(emphasis supplied).

This protocol is typically so that a second analyst and a defense expert can protect against the potential bias of the actual analyst doing the testing. In this case, the analyst who did the testing and the defense expert were called and established the blatant bias of the lab supervisor, Mr. Deguglielmo.

What is most troublesome is that the State's expert, Mr. Deguglielmo, testified that he knew this was going to be a highly publicized case and he therefore prepared himself, by paying special attention to this case. (Vol. 34, P.1410). Mr. Deguglielmo even testified that he did about 50% of the lab work. (Vol. 34, P.1408). Therefore, if Mr. Deguglielmo's testimony is to be believed, he completes the defense argument that there was no independent review. If he participated in 50% of the testing, the presence of a third analyst is mandated to complete an independent review. The NRC II states that, "[b]ecause an analyst might fail to notice an inconsistent result or a recording

error, it is important to have analytical results reviewed by a second person, preferably one not familiar with the origin of the samples or issues in question.” NRC II at 81. (emphasis supplied).

Even the Trial Court was troubled by the sloppiness of the work, and inquired of the State: “don’t you think it’s upsetting to the Court that obviously some of these errors presented are what you might call scrivener’s error or documentation that may not go to the actual methodology of the tests, but doesn’t it reflect somewhat of a sloppiness that does call into question the reliability, especially when the technician himself, the one who performed the test, disagrees with the supervisor as to the reading of those same tests, reliability of tests?” (R.4455) (emphasis supplied). Not only did Mr. Warren make numerous clerical mistakes that Mr. Degugliemo, as the “second independent analyst”, failed to detect and correct, Mr. Deguglielmo himself admitted he wrote the wrong case number on the document that listed the “calls” for Murray, Vest, and Taylor. (R.3933).

The Trial Court also recognized the lack of independent review and even inquired of the State, “where do you seek to find your independent review?”. (R.4455).

The Trial Court recognized the numerous inconsistencies in the testimony, and at one point actually precluded the State from going into additional material because, as the Court stated, “I am afraid of more discrepancies. That would just be another source of questioning.” (R.3963-64).

Dr. Baum pointed out to the Trial Court that the NRC indicates that “an analyst can be biased consciously or unconsciously, in either direction.” (R4179). The NRC states that “Independent `second reading’ is common in forensic laboratories and is

required by the guidelines,” (TWGDAM 1991, 1995) (NRC II at 81). Dr. Baum testified that:

It was obvious that the results were not independently reviewed by a second qualified analyst before the report was issued and that the case file was not. And the reason for that is there were numerous errors in the paperwork that I received. Most - - a lot of typographical errors but they were never corrected. If they were independently reviewed, they should have been corrected.

Also the two people who theoretically reviewed the case had different opinions on the timing of results. So, therefore, it was not two independent reviews, but it was just really one review, one person looking at it, because the other opinion was ignored, and there were also no worksheets for critical review.

(R4182).

Dr. Baum stated he, “could not do a complete independent review as the defense expert which this requires because not all the paperwork or the documentation or photographs were provided.” (R4182).

It is well settled that “Data, documentation and reports must be reviewed independently by a second qualified individual. Prior to issuing a report, both individuals must agree on the interpretation of the data and the conclusions derived from that data.”

(R4186, L6-11) (citing TWGDAM’s guidelines).

After reviewing all of the documentation that was provided by the State in this case, Dr. Baum testified that “[t]he results of this test are inconclusive and they cannot be reliable because they have not undergone this independent review by **two independent analysts who agree to the interpretation of the data** as stated in this standard 8.4 from the TWGDAM.” (R4188, L6-10)(Reading from TWGDAM) (emphasis supplied). Dr. Baum testified that:

The laboratory must maintain documentation on all significant aspects of the DNA analysis procedure as well as any related documents or laboratory records that are pertinent to the analysis or interpretation of results so as to create a traceable audit trail. The document - - this documentation will serve as an archive for retrospective scientific inspection, reevaluation of the data and reconstruction of the DNA procedure.

(R4192, L11-22)(emphasis added).

Dr. Baum testified to the blatant biases that were revealed and the recording errors and oversights that were negligently missed by Mr. Deguglielmo. To illustrate an individual review was not performed, Dr. Baum testified:

Documents that must exist are missing, I haven't seen population database, I haven't seen quality control critical reagents, case files and notes are not complete. Photographs are missing. Printouts are missing. Data analysis and reporting is not complete. Equipment calibration and maintenance logs have not been provided, so are not complete for the review. Proficiency testing results on individual personnel have not been complete or provided. I haven't seen quality assurance and audit records.

(R4193).

He testified that these missing documents prevent an independent review of the testing procedures and:

. . .that's not good enough in the community, in the forensic community, if you see some data, you have to make a document of it so that somebody else can come and see what you've seen. You can't just put it in the reports, and there's not - - he hasn't provided all the documentation of his looking - - at certain aspects of the tests, especially some of the controls has not been provided.

(R4193-R4194) (emphasis supplied).

As to the some of the disagreements between the two analysts, Dr. Baum's testified as follows:

Q. Okay. I'm showing you what's been marked as State's 2. Is this

the report that you're referring to?

A. Yes, this is the page 1. . .

Q. And is there a problem in that report under Q-42 hair 1 that caused you reason for concern?

A. Yes. A fainter B was read for D7S8 and - - let me get -

A. And it was not read by Mr. Warren.

Q. And in addition to that?

A. That was for D7S8 for Q-42 hair 1.

“It looks like the data was made to fit the case. There were differences for instance, in intensity of dots and you could tell there's a different bias to try to make the - - to ignore the intensity differences and to make it fit into the case. Also there seems to be bias in how the statistics were calculated because what happened was all the extra dots were ignored in that, which, again, shows a bias to try to make it fit into the case.”

(R4180, L8-18) (emphasis supplied).

Q. Okay. When you review that chart (from the State's expert) under Q-42 hair 1 under CFS1PO.

...

A. Right. A 12 was listed which I had trouble seeing on that one.

Q. And what does Mr. Deguglielmo's handwritten report say about Q-42 hair 1 CFS1PO?

A. It says that for CFS1PO, it says, “Very faint, inconclusive.” It says it's inconclusive on his handwritten notes.

Q. What does that lead you to conclude?

A. That the table is not accurate. If something is inconclusive, it can't be reported out and he writes on his handwritten notes inconclusive for that one.

(R. 4224, L6-23) (emphasis supplied).

Therefore, Mr. Deguglielmo's handwritten notes indicate "Very faint, inconclusive" at CFS1PO, but the table and report, he generated and offered into evidence at trial reports a 12. The 12 was not called by Mr. Warren who did the testing. This clearly demonstrates analyst bias. He is, trying to make the results fit this case.

Even Mr. Deguglielmo himself was asked about his notarized report that listed the result as being inconclusive:

Q. Mr. Deguglielmo, does your report that's notarized on the bottom of this page say there is no result for Q-42, hair 1, under CFS1PO?

A. Yes, it does.

Q. Doesn't there show a 12 on your chart under CFSIPO (sic) Q-42, hair 1?

A. CFS1PO, yes, it does.

(R3931, L6-12)(emphasis supplied). His notes state very faint, inconclusive, his notarized report states no result, but he calls it a 12 at trial. Restated, he initially calls it very faint, when reporting out he makes the decision that it is too faint to call and indicates no result in his notarized report. However, to make his calls fit this case, he contradicts his notarized report that is should be called a 12. The scientific community does not allow physical evidence in the scientific community undergo through such an evolution, it is either present, or it is not.

The State's expert recognized the need for an independent review. Yet, Mr.

Deguglielmo attempts to circumvent the requirement that two qualified analysts agree by testifying at trial that he and Mr. Warren did not disagree. (Vol. 34 P.1366, L.14-15). However, Mr. Warren testified that he does disagree with Mr. Deguglielmo, and his conclusions. Further, he testified he first observed Mr. Deguglielmo's notes when they were provided by defense counsel, not by Mr. Deguglielmo. (R. 4066, L15-25; R. 4067, L8-17; R. 4070, L1-12). Most importantly, after reviewing his worksheets, he disagrees with Mr. Deguglielmo's findings. Therefore, pursuant to the NRC recommendations, TWGDAM and ASCLD-LAB accreditations guidelines, the results should have never been reported out. Thus, the jury never should have heard any testimony in this regard.

Even the State's expert witness, Dr. Martin Tracey, testified that the "general standard" in the community is there should be a consensus before issuing a report. He stated that in "most laboratories, if there's an inconclusive call, it's because the original analyst and the reviewer disagree." (Vol.35,P.1474,L2-13). One analyst can not just say we do not disagree, both must say that we do not disagree. They clearly disagree in this case.

Dr. Tracey was posed a hypothetical question specifically involving the facts brought out during the Frye, hearing; "Doctor, if there was a – if there was a test done where [1] there was no consensus among the analysts, [2] there are differences in interpretations among the two analysts, [3] there was no independent review of the work done, [4] there were several steps missing, [5] reports being issued that are inconsistent with what the worksheets actually show, would that give you reason for serious concern? A. If all those situations were true, surely." (Vol.35,P.1475,L13-23)

(emphasis supplied).

Mr. Warren, the actual analyst, testified that he was responsible for the extraction of the DNA from the evidence, specifically hairs B-1 through B-5. (R4063, L6-7). He also testified that he completed the extraction himself, and that Mr. Deguglielmo was not present. (R4063, L11-13). Once he and Mr. Deguglielmo felt there was sufficient DNA present in the evidence samples, Mr. Warren began the testing on the known samples from Murray, Vest and Taylor's blood samples. Mr. Warren was then responsible for all of the subsequent testing. He ran the gels, did the strip hybridizations and filled out worksheets for what he saw. (R4065, L2-5). He also did the DQ Alpha, Polymarker, and CTT. Mr. Warren was asked: "[w]as Mr. Deguglielmo present during any of those stages? No, no. Did Mr. Deguglielmo supervise you during that? He was in the building." (R.4065,L.7-13). Being in the building is far from providing supervision.

Mr. Warren testified that he never had the opportunity to speak with Mr. Deguglielmo or to view Mr. Deguglielmo's notes, worksheets or written reports. (R4065, L16-20). When Mr. Warren initially viewed Mr. Deguglielmo's trial chart, which represented what Mr. Deguglielmo had seen extracted, against the DNA standards for Steven Taylor, Gerald Murray and Alice Vest, that it caused him great concern. He testified that:

- A. When it was pointed out to me by counsel that there were some differences between what I had reported in my original report to Mr. Deguglielmo and what was on here, specifically - - I can give you some examples. Q-20, B-3 - - let's see. LDLR, polymarker LDLR, I had reported an A and he had reported an A fainter B. Q-20, B-4. And HBGG, he had - - I had reported an A, he had reported an A

fainter B next one down for D7S8, again, the same hair, I had reported a B and he had reported a B fainter A.

Q. Why does that cause you concern?

A. Well, it concerns me because I hadn't seen them...

(R. 4068) (emphasis supplied).

These three additional fainter calls were made to create a theory of a mixture of Murray and Vest. Without these, the theory evaporates, and the testing actually exculpates Murray. Even the State's own expert, Dr. Martin Tracey, testified that in this situation the test should be listed as inconclusive. He specifically was asked if, “. . . on the GC loci one of the analyst scores it as a BC, the other analyst scores it as a B. Shouldn't that give you reason for concern? A. That's the kind of situation that I would say probably is best listed as inconclusive unless it can be resolved.” (Vol.35, P.1487,L.17-20). That example was posed giving just one difference in interpretations not three, as are the facts in this case.

To further demonstrate the apparent analyst bias, Mr. Deguglielmo did not log secondary bands when it violated his theory, but he called fainters when it supported his theory.

Mr. Deguglielmo himself testified that his protocol requires that an independent, qualified analyst review the work of the initial analyst. The reasoning is to ensure the integrity of the work. Also, “an independent review doesn't mean you stand side by side with someone.” (R, 3357, L16-20).

However, Mr. Deguglielmo attempts to circumvent the requirement of a second analyst, *one that does not stand side by side*, by suggesting that if he is *supervising* an

analyst he somehow becomes an independent second analyst, even if he completes 50% of the work, he never meets with the initial analyst, never compares notes or worksheets with the initial analyst, never discusses the different calls each of them made, and unilaterally decides what calls to make.

Mr. Deguglielmo had to recognize the fact that the two analysts must agree and was asked, “[i]sn’t it required that before a laboratory can issue a report or a result regarding PCR that two analysts must agree on the interpretations?” He responded, “[t]he results, that’s correct, yes.” (Vol.34, P.1361). Also, he was asked, “[i]sn’t it standard procedure in your lab that if two analysts do not agree after a discussion on the interpretation that you would call it inconclusive? A. That is correct, ...” (Vol.34, P.1366).

This Court must acknowledge that whether Mr. Deguglielmo is supervising, as he says, or whether he is actually an independent second analyst, he must review the documents independent of the initial analyst to ascertain whether he made the same interpretations, and to make sure no errors exist, including clerical errors. Mr. Deguglielmo himself testified that he never had any discussions with Mr. Warren regarding any of these errors prior to trial preparation, with one exception, they discussed the “broken gel”. (R.3874). That testimony at the Frye hearing should be compared to his trial testimony just days later. During the trial he was asked, “[a]nd Mr. Warren didn’t tell you that the gel broke, did he?” To which he responded, “I don’t honestly remember. He told me something about it, which is why there are two gels.” (Vol.33,P.1325) (emphasis supplied).

Whether Mr. Deguglielmo calls himself a supervisor or an actual independent

second analyst, he clearly did not check the paperwork for errors, because the defense pointed out numerous errors. He also did not agree with Joseph Warren, the actual analyst who testified. (R3357, L10 through R3359, L4). Even Mr. Deguglielmo told the Trial Court that the independent review is not an optional step (R. 3559, L13-23).

Mr. Warren was so concerned by what by Mr. Deguglielmo presented, he spoke to two other Ph.D scientists in the field (R4075,L.16-17). After doing so, his opinion was confirmed. Had he been presented this evidence in his laboratory, he would have submitted it as inconclusive. (R.4077, L.1-2).

To affirm the Trial Court's decision to allow the DNA testimony in this case this Honorable Court must go contrary to the NRC, FBI, and TWGDAM's protocol requirements. Each of the previous mentioned protocols require that two different analysts independently review the work, consult with each other and if they are in agreement, the results are allowed to be reported out. If they are in disagreement, the test results are deemed inconclusive and unreliable. Even the State's own expert, Mr. Deguglielmo, was asked, "[a]nd doesn't all the literature say in order to ensure reliability that the test should be reviewed by an independent qualified analyst? That would be reasonable. Yes." (R.3357,L.4-7).

Mr. Warren stated it succinctly by testifying that "...[w]hen one has to resort to very strenuous arguments to make... the data fit the case, that tells me that perhaps something is wrong with the data." (Vol.23, P.228,L18-21). He is the one who did the testing. Dr. Baum added that he would give great weight to the opinion of the man who actually performed the test because, "he was there and he knows what happened with

the test and he knows if there were any problems with the test.” (R.4260). Dr. Baum testified that if the actual analyst said the test should be deemed inconclusive, then it should be deemed inconclusive. (R.4260). Appellant respectfully submits that is exactly what this Court should do, give great weight to the testimony of the man who did the test, deem this test inconclusive, and reverse Appellant’s conviction.

II. LACK OF SUBSTRATE SHAFT CONTROL.

Microdiagnostics is the name of the laboratory in which the DNA testing was done in this case. The State’s expert witness, Mr. Deguglielmo, the director of that lab, testified that at the time of the testing in this case his laboratory was not accredited for forensic applications in PCR testing. (R3356,L2-10) (emphasis supplied). Further, his protocol failed to include the substrate shaft control. This control is necessary to detect contamination. However, because it was the standard in the field, it was included in his protocol at the time of the Frye hearing, as well as at the trial.

When Dr. Baum noticed that Mr. Deguglielmo’s protocol at Microdiagnostics failed to even address this critical control against contamination, he testified that he was concerned about Microdiagnostic’s protocol because:

- A. There were several things. One thing is, especially for hairs B-3 and B-4, [the critical hairs in this appeal] this protocol did not state that the proper controls should have been taken from the hairs. For instance, the DNA in the hair is in the Hair root and that’s clipped and put in a test tube and the DNA is extracted from that, but in general forensic protocols in the field and the manufacturer who sells kits that Mr. Deguglielmo uses, basically just taking a control adjacent to the root. So, you take the root section, you take a piece of the

hair adjacent to the root. Adjacent to the root should not contain any DNA because the DNA in a hair is only in a root section. By taking a section adjacent to the root, it's a control to show if there is any contaminating DNA on the hair itself if it had not been washed properly and correctly. Mr. Deguglielmo did not take the section adjacent to the root, so there's no way to tell if there was a contaminating fluid and if it was washed properly and correctly. Because if there was and it was contaminated might see the fainter dots there if that's what happened. So his protocol was missing in taking that control and he did not perform it, but that's the standard in the field, to take an adjacent section.

(R. 4233, L9-25) (R. 4234, L1-10) (emphasis supplied).

The Defense called Joseph Warren, the lab analyst who conducted the DNA testing in this case. Mr. Warren testified that he was employed at Microdiagnostics in Nashville, Tennessee from September of 1996 to November of 1997, as a laboratory supervisor and senior forensic scientist. (R4054, L10-11)(R4054, L6-8). Mr. Warren testified the results should be deemed inconclusive. (Vol. 39, P. 2096-2105).

Without objection, Mr. Warren was qualified as an expert in the field of genetics and DNA testing. Mr. Warren testified that he and Mr. Deguglielmo received slides Q-20 and Q42, and that they removed the hairs from the slides to be tested. Mr. Warren testified that during the testing, Mr. Deguglielmo was not present.(R4063, L11-13).

Mr. Warren candidly testified that he had not been trained properly and was not aware of the necessity for a hair shaft control, and that based on his knowledge and training at the time of the Frye hearing and at trial, the DNA tests should be deemed inconclusive. He also testified that "it's quite embarrassing" to see all of the errors he made pointed out to him, and for him to have to testify about it. (R.4085). He further testified that it was Mr. Deguglielmo's responsibility to keep up on the changes in DNA

testing and to teach his staff the new procedures to ensure reliability.(R4069, L3-5). Mr. Deguglielmo “... is required to keep abreast of the literature” (R.4073,L89). Mr. Deguglielmo failed to do so, and his protocol did not even address this critical control at the time of testing.

Mr. Warren went on to testify that there are three very good reasons for reporting this test as inconclusive: first, the lack of the substrate shaft control; second, the difference in interpretations; third, the lack of an independent review. (Vol. 39, P.2096-2105).

He testified that the results in this case should be reported out as inconclusive because of the lack of this critical control. He testified that “... we didn’t notice at the time, but there is a control missing here and that’s the hair shaft control. The hair shaft control controls against [contamination]- - there’s only one place the DNA from a hair that belongs to the individual that grew the hair can be and that’s at the base, the follicle.” (R.4072).

Mr. Warren was asked his opinion regarding the results that were arrived at by Microdiagnostics in this case, and testified that, “they are two-fold. The faintly amping alleles”. . . were too faint and too ambiguous to be interpreted decisively. There was too large a window for ambiguity in these tests.” (R.4071, L10-18). Mr. Warren went on to testify that because there was too much ambiguity with the interpretation of the tests, he would have reported the results “as inconclusive.” (R.4071-4072). Mr. Warren stated he had “reservations” about some of the results that were seen on these strips. Those reservations involved interpretation as well as the validity of the test. (R.4070, L25, R.4071, L1-3).

Mr. Warren testified that:

. . . This sort of testing, PCR testing, whether it be polymarker, DQ alpha or CTT, is designed to present straightforward empirical data to be viewed by a court to help determine guilt or innocence of a Defendant. In this case I think that there are enough ambiguities with the oddness of the mixtures that in the - - that we have at that point moved from empirical science into the realm of speculations, that we are saying, in effect . . . That the victim's DNA found on the hair shaft is probably from the victim.

Well, this test was not designed for a probably. It was designed to give you numbers, to say that the likelihood that this DNA came from this person is this. Not that it probably should come from this; it may have come from this person. That's my objection. I don't think that the admissibility of this evidence should hinge on probabilities. I don't think that's appropriate for the science.

(R4115, L7-25 through R4116, L1-3) (emphasis added).

It is undisputed that this critical control against contamination was not done. The need to conduct this procedure was the standard in the scientific community at the time of testing, at the time of the Frye hearing, and at the time of trial. Failing to do so renders this analysis inconclusive.

III. CONTAMINATION

Dr. Baum testified that presently DNA PCR testing is widely accepted in the scientific community. However, initially, the major concern with the methodology, and the way the DNA PCR testing was carried out, was the issue of contamination. The most significant issue continues to be contamination, and whether two samples will contaminate each other. That is, whether the amplified product will contaminate the unamplified product because it takes very little amplified product to contaminate the

unamplified product. (R.4176, L12-20).

Referring to The National Research Counsel (NRC), Dr. Baum testified that after having reviewed the documentation provided by the State regarding the DNA testing in this case, “there are examples of the sample mixup or mislabeling in the analysis stream. Wrong lanes were loaded on the electrophoresis gels twice. Wrong samples were recorded on the same sample sheets, where the transfer of a solution to the wrong tube occurred” (R.4178, L20-25). Dr. Baum went on to testify that there were great concerns because of the other errors and it was clear “they also did not follow rigorous adherence to their defined procedures for sample handling.” (R.4179, L3-5).

Reading from TWGDAM, Dr. Baum testified that:

The laboratory must maintain documentation on all significant aspects of the DNA analysis procedure as well as any related documents or laboratory records that are pertinent to the analysis or interpretation of results so as to create a traceable audit trail. The document - - this documentation will serve as an archive for retrospective scientific inspection, reevaluation Of the data and reconstruction of the DNA procedure.

(R.4192, L11-22)(emphasis added).

Dr. Baum went on to testify that:

Documents that must exist are missing, I haven't seen population database, I haven't seen quality control critical reagents, case files and notes are not complete. Photographs are missing. Printouts are missing. Data analysis and reporting is not complete. Equipment calibration and maintenance logs have not been provided, so are not complete for the review. Proficiency testing results on individual personnel have not been complete or provided. I haven't seen quality assurance and audit records.

(R.4193, L3-13).

He further testified that these missing documents prevent an independent review of the testing procedures and:

. . .that's not good enough in the community, in the forensic community, if you see some data, you have to make a document of it so that somebody else can come and see what you've seen. You can't just put it in the reports, and there's not - - he hasn't provided all the documentation of his looking - - at certain aspects of the tests, especially some of the controls have not been provided.

(R.4193, L24-25; R4194, L1-7).

Dr. Baum testified that certain photographs were present, and certain photographs were missing. Significantly, the photograph that was missing was a photograph of a control which is necessary to ensure the test was done properly. Dr. Baum testified that there are "two negative controls, amplification negative and an extraction reagent negative, and those controls were not provided because they were never photographed for polymarker and DQA1." (R.4201, L20-24). As it relates to hairs B-3 and B-4, (the two hairs the State allege are a mixture of Gerald Murray and Alice Vest), Dr. Baum testified that the significance of needing these photographs is comprised of:

. . . two reasons: If there's extra dots or bands in the negative controls or even the positive, I know there's a contamination problem so I can't judge, first of all, whether there's any contamination problem. Second, I have to know whether the test was conducted properly and one of the ways I know if a test was conducted properly is to have a positive control, a DNA of known type and make sure that it types correctly. So, without those controllings I can't tell whether the test was conducted properly or improperly.

(R.4202, L25; R.4203 L1-11).

What further aggravates this situation is that Mr. Deguglielmo, the State's expert, never provided any documentation that he ever saw those controls. (R.4203, L15-17).

Dr. Baum further testified that there:

we're missing photographs for the STR gels. I only saw one photograph and theoretically there were two or three STR gels. I'm confused on the number of gels actually from the paperwork.

(R.4204, L4-8).

Dr. Baum explained that this would cause a problem,

[b]ecause even if a gel is not run or fails, it has to be documented what happens. For all I know, there could be exculpatory data on the gel that failed and you can't just choose to throw out what you don't like and that's why everything has to be provided because if it is exculpatory and it's hidden, I could not tell.

(R.4204, L15-21).

Dr. Baum testified that this leads to the conclusion that there are two missing photos of two different gels. And that is significant in that he cannot independently verify the results because he was not provided the photographs of the gels. (R.4205).

Dr. Baum was not provided copies of Mr. Deguglielmo's handwritten notes on the evidence. The significance is that there was no documentation to show that Mr. Deguglielmo ever looked at the gels, which is necessary for an independent review. (R.4207). When asked why that was important, Dr. Baum testified that Mr. Deguglielmo,

[w]rote the report from the case and signed the case, so he's responsible for looking at all the data and verifying that data also. Since he ignored Mr. Warren's reading from the PM DQA1, I don't know what he's ignored and what he hasn't.

(R.4207, L17-21)(emphasis added).

Even Mr. Deguglielmo had to admit that the photographs were missing. He was asked:

Q. And the photo that is missing there is of the positive and negative control which would show any contamination in the standards, isn't that right?

A. It would show any contamination in anything, that's correct.

Q. That's the photo that's missing there, right?

A. That's correct.

Q. We're also missing any documentation from you that you ever saw those controls, isn't that correct?

A. I did not report them, that is correct.

(Vol.34, P.1355).

Dr. Baum was asked if the results from Microdiagnostics show a mixture and he testified as follows:

Q. And, Doctor, they hypothesize that there's a mixture between B-3 - - between Gerald Murray and Alice Vest. Do you agree with that?

A. No, I don't.

Q. Why?

A. If it was a mixture between Gerald Murray and Alice Vest for Q-20, B 3 presence, I would have expected at the TPOX to see an 8 comma 10 instead of just an 8.

THE COURT: Which box?

THE WITNESS: Alice Vest is a 10. Gerald Murray is an 8. So, if it's a mixture, I would have expected to see an 8 comma 10, which I didn't see. And for HBGG for Q-20, I would have expected to see an A, B, because

Alice Vest is an AB while Gerald Murray is an A. And all that I saw or anybody else saw in that case was an A. So, again, that's a second inconsistency and because of that I would - - I don't feel that the hypothesis is correct.

THE COURT: Which was the other one you referred to?

THE WITNESS: HBGG.

THE COURT: You're saying AB?

THE WITNESS: I would expect to see an AB, A fainter B, and there was no indication by myself or anybody who looked at the case that a B is present.

Q. Doctor, if they explain this by saying those different alleles were not present because of differential amplification, would you accept that hypothesis?

A. No, I would not.

Q. Why not, Doctor?

A. Because I would have expected to see differential amplification for everything, not just for one selected loci. I would have expected at least a hint, even if it wasn't what they call callable or above the threshold, I would have at least expected a hint and I did not even see a hint at those locations of those other missing alleles.

Q. So, Doctor, if everything was done correctly in this test, you didn't have any problems with this test whatsoever and the way it was performed what would your conclusion be regarding hair B-3?

A. My conclusion would be that it's inconclusive because I can't tell exactly what's going on.

Q. And, Doctor, can a scientist draw a conclusion that it's a mixture if they don't rule out all the other reasons for the fainter bands?

A. No. There's no direct evidence in here for a mixture.

- Q. And has Mr. Deguglielmo, to your knowledge, been able to rule out the other explanations for these fainter bands and missing fainter bands?
- A. No, he hasn't.
- Q. What are some of those other reasons, Doctor?
- A. Other reasons for fainter bands are - - could be a contamination problem or that the test was not performed correctly. For instance, if the temperatures were not correct, you would expect to see extra bands. If there's some what are called washing steps and the temperatures are too low, you do get extra bands, or it was - - as I said or it was mixed, so I can't tell right now, because it's not consistent with anything.
- Q. Doctor, on B-4, is anything missing to support their hypothesis of a mixture between Murray and Vest on B-4?
- A. We're missing again the 10 from the TPOX. There's no indication for that. But - - and also we're missing on the LDLR the B, which, again, it should be consistent, just like with the B-3 that I stated. We're missing the B, if it was a mixture of Alice Vest and Gerald Murray, we would have expected to see it.
- Q. Now, Doctor, their hypothesis is that hairs B-3 and B-4 are mixture of Alice Vest and Gerald Murray. Do you agree with that?
- A. No, I do not.
- Q. Do you agree that hairs B-3 and B-4 are a mixture of anything?
- A. No, I'm not sure that they are a mixture of anything. There's no direct proof for a mixture in there.
- Q. And, again, Doctor, just assume that everything was done properly in this test, every control, everything was there and you were able to verify everything, what would your conclusions be regarding B-3 and B-4?
- A. That they would be inconclusive.

Q. Doctor, would you say that hairs B-3 and B-4 came from the same mixture, the same people?

A. No, I would not.

Q. Why?

A. Because there are differences in the typing results between B-3 and B-4 in the LDLR and in the HBGG.

Q. What does that mean, Doctor?

A. That they came from different individuals because they got different typing results.

Q. So, in order for B-3 and B-4 to be a mixture of the same two people, whoever they are, B-3 and B-4 have to say exactly the same thing?

A. They should have the same alleles, yes.

Q. Okay. Is there anything else about B-3 and B-4 that you feel is significant we have not discussed?

A. Okay. B3 and B-4, yes. The other problem that I have with it is when I went back on the original documentation and looked at it, B-3 and B-4 were packaged with Gerald Murray's hairs and they were originally tested in **parallel of Gerald Murray's hairs and I'm concerned there might have been a mix-up of the hairs initially because one of the other guidelines from all these guidelines is the evidence hairs should be tested and worked with completely separate from the known samples and they should not be packaged together, and all these hairs were packaged together.**

So, I'm very concerned that it's unreliable and there's a potential for a sample mix-up and it's's very easy to mix up hairs if they're not handled correctly and even the first DQ alpha amplification was done with them side by side.

(R.4233, L6 through R.4235, L24) (emphasis supplied). Even Mr. Deguglielmo acknowledged that contamination can occur in the way the evidence is packaged.

(R.3361,L.19-20).

As it relates to washing the hairs, Dr. Baum testified:

A. The hair is supposed to be washed because it's supposed to remove - - if it - - it's supposed to remove any contaminant in HLA. If they hypothesize a mixture here, it shows the hairs were not washed properly.

Q. What does that lead to you conclude if the hairs were not washed properly?

A. That it's again sloppy laboratory technique in not taking care to wash the hairs because the hairs should only have one DNA type and the DNA type should be from who the DNA originated from. If there is a mixture here, and I'm not saying there is, that means there was contaminating DNA and the hairs were not completely washed and successfully washed. So, there's a washing problem here.

Q. Doctor, is it common to get mixtures in forensic DNA when you're dealing with hairs?

A. Not if they're washed properly.

(R4223, L16 through R4232, L19) (emphasis supplied). Even Mr. Deguglielmo testified that getting a mixture of DNA's during DNA testing on hairs is uncommon. (Vol.34, P.1384).

Mr. Deguglielmo testified that if one uses too much DNA on any sample it is possible to get unreliable results. That is why quantitation is done. Further, using too much DNA is one of the reasons fainter bands can show up. (R.3909-3910). When asked the question, if you thoroughly wash the hairs, you should not see any fainter bands, Mr. Deguglielmo responded that "theoretically that's true". (R.3369).

Mr. Deguglielmo testified that it is his procedure that if he sees extra bands in an evidentiary sample he has an obligation to report them. Yet, he

went on to testify that he indeed saw secondary or faint bands on some of the standards, and they were not listed anywhere in his reports, notes, or worksheets.(R.3909, L14 through R.3910, L21).

Mr. Deguglielmo even testified that contamination can skew the test results.

Q. Isn't it true that contamination can cause these fainter alleles?

A. Yes, it could.

Q. Isn't it true that contamination can cause fainter bands?

A. Yes, it could.

Q. Isn't it true that contamination can cause any myriad of problems with the test?

A. Yes. Potentially.

(R.3360, L12-20).

Mr. Deguglielmo was asked about a gel that allegedly broke.

There was no documentation of this in the notes, worksheets or reports, and the testimony is years later.

Q. And that 97269 does not match the gel number on this worksheet that says 97262, correct?

A. That's correct.

Q. Can you explain that difference?

A. Yes, ma'am. Actually I was talking with Mr. De la Rionda [Assistant State Attorney] about this just this morning. I had a note here to myself when I had gone through this file looking at that, remembering that Mr. Warren had said something to me about the original gel having broken, there being a crack in the gel or crack in the plate. As a result of that, the gel can't be scanned and so he reloaded the gel.

Q. Was there a photo taken of that gel?

A. Well, if it was cracked, the plate or the gel itself, then, no, it wasn't a photo. You couldn't take a photo of it.

Q. And this is the first time it's ever been mentioned, is it not? That there was a photo, that the gel was cracked and had to be reloaded, is that right?

A. To best of my knowledge, it's the first time anybody has asked me why those two things are different.

(R.3374, L15 through R.3375, L12).

This testimony, and lack of documentation, is especially troubling in light of Mr. Deguglielmo's testimony that when doing PCR testing, one must use caution because the liquids can make aerosols. He testified that,

[a]ny time you're dealing with liquids, you can have the potential for making aerosols or carrying little droplets over so that the pipetting mechanisms that are used are what we call aerosol resistant. They're plugged so aerosols cannot be carried from one sample to the next and you use a new one with each test that you do.

(Vol.33, P.1220).

It is unknown what happened when this crack in the gel, or plate, occurred because no one documented what happened. It has not been determined if the known sample contaminated the unknown sample, either through actual contact, or through the creation of aerosols that may have occurred when the gel cracked. The NRC II addresses this potential problem and noted that "when loading an electrophoresis gel, a sample loaded in one lane might leak into an adjacent lane, which might then contain a mixed sample. Confusion resulting from lane-leakage problems is typically avoided by leaving alternate lanes empty..." NRC II at 82. That was not done in this case, and there is the potential for lane-leakage, especially when you have a cracked gel and no

documentation to support its occurrence. The unaccredited Microdiagnostic's laboratory clearly did not adhere to the scientific rigors mandated by this Court in DNA testing. Again, perhaps this is just another example of what can occur when critical evidence is sent to a lab that is not accredited.

IV. VIOLATIONS OF MANUFACTURER'S INSTRUCTIONS

Not only were NRC, TWGDAM, FBI and Microdiagnostics' protocols violated, the laboratory in the case even violated the manufacturer's instructions in the testing of the DQA1 amplification kit. The manufacturer, Perkin Elmer, specifically warns against placing the DNA probe strips on paper towels. (R.4255, L4-9). The manufacturer's directions state that because paper towels are made with bleach, they can effect the integrity of the strips. (R.4245, L23-25; R.4256, L1-8).

Referring to the instructions, Dr. Baum testified that there are "several places in here which warn against using bleach on any of the equipment or using bleach around the chromogen reagent because it will fade the dots." (R.4246, L5-8). Microdiagnostics' protocol deviates from the manufacturer's instructions in that Microdiagnostics' protocol "Step 11B, 'Wipe tray with a lab wipe or paper towel'." (R.4246, L18-19.) (emphasis added). If one assumes that Microdiagnostics' protocol was followed in this case, it is contrary to the manufacturer's instructions, and may have effected the integrity of the strips.

Microdiagnostics further violated Perkin Elmer's instructions again by the manner in which they labeled the tubes. Mr. Deguglielmo testified that his protocol indicates

that the tubes

should be labeled and numbered. However, there was no record that this was even done in this case, not in Mr. Deguglielmo's notes nor his worksheets, and not in Mr. Warren's notes nor worksheets. However, Mr. Deguglielmo somehow managed to testify that they were labeled and numbered in this case. If this Court accepts his testimony that they were indeed labeled and numbered, it was done improperly. Mr. Deguglielmo testified that they were labeled on the top of the tube, and the Perkin Elmer protocol and instruction manual provided with this kit states in capital letters do not label them on the top of the tube. (R.3900, L12 through R.3901, L11). This is especially important when considered with the testimony of the State's own witness. Mr. Deguglielmo admitted that gels have been mislabeled in his laboratory. (Vol.34, P.1393).

Therefore, Microdiagnostic's protocols violated Perkin Elmer's instructions. If indeed they followed their own protocol, which cannot be determined because they made no notation as to whether or not they were labeled, they would have violated the instructions.

Mr. Deguglielmo's lab further failed to follow the manufacturer, Perkin Elmer's, instructions in that they failed to do an agarose gel electrophoresis. (R.3902, L3-19).

Q. I'm referring to what Perkin Elmer states agarose gel electrophoresis to be carried out.

A. As you're describing it, I'm not sure what you're talking about.

Q. And that's because agarose gel electrophoresis is not even mentioned in your protocol, isn't that correct?

- A. No, that's not true.
- Q. Can you direct me, please, to the page in your protocol that explains and states that you need to do agarose gel electrophoresis?
- A. It's not in the properties you have here because it wasn't in a protocol that was used in this case.
- Q. And it was not done in this case, correct?
- A. That's correct.

(R.3902. L3-19)(emphasis supplied).

This response appears to indicate that agarose gel electrophoresis gel is not done during this type of testing. This response is misleading. This step is done during this type of testing, it is just that the unaccredited Microdiagnostics Laboratory does not routinely conduct that phase of testing. (Vol.34, P.1386).

Quantitation was discussed earlier, and is also mentioned in Perkin Elmer's instructions provided with its kit. However, one issue that was overlooked at trial was the examination of the hairs under a microscope to determine whether there were any other bodily fluids on the hairs. It was not overlooked by the manufacturer. Unfortunately for the State, it is another example of its failure to follow instructions and protocols. Mr. Deguglielmo was asked to read the instructions provided with the kit as it relates to this issue, and testified that the analyst should "examine a hair under a dissecting microscope, **no possible** presence of body fluids on hair, cut off about five to ten millimeters for possible root digestion. Because hair may contain cellular material on the surface, it may or may not originate from the hair donor. It is advisable to cut off five or ten millimeters from the shaft adjacent to the root for separate analysis. The shaft

may be retained for remounting.” (R.3915). The State’s expert failed to mention that is possible to detect the presence of “body fluids” on the hair with a dissecting microscope. Further, he misread the instructions to the Court and jury. The actual instructions state that an analyst should “note” possible presence of bodily fluid. Had he read the instructions correctly, this may have alerted the Court, and the Jury, to the fact that Mr. Deguglielmo failed to note the presence of a bodily fluid. However, Mr. Deguglielmo then goes on to base his entire hypothesis on the existence of an additional bodily fluid that was not seen or noted, thus, creating a mixture.

Perkin Elmer’s instructions state it is “advisable” to take a cut from the adjacent shaft. Mr. Deguglielmo first testified that there was not enough hair to take a cut from the shaft, (R.3915) then, he was forced to admit that during the time of this testing his lab was not taking a cut from the start on any of their testing, regardless of the amount of hair. (R.3916). Clearly, this is not the type of “scientific rigors” this Court has mandated.

V.

THE DIGITIZED PRINTOUTS OF THE EVIDENCE WERE MANIPULATED BY THE STATE’S EXPERT.

One of the issues in Hayes, was the then controversial, “band-shifting” technique. In that case, this Court reversed the Defendant’s murder conviction and vacated that death sentence, finding that “[w]hen a major voice in the scientific community, such as the National Research Council, recommends that corrections made due to band-shifting be declared “inconclusive,” we must conclude that the test on the tank top was

unreliable.” This Court ruled “[i]t is clear from the record that the methodology used by the technician in this case was not sufficiently established to have gained general acceptance in the scientific community under the Frye test. Accordingly, we must hold that the DNA match concerning the tank top was inadmissible as a matter of law.” Hayes 660 So. 2d at 264.

Band shifting was a technique used by a technician in an attempt to make quantitative corrections in hopes of finding a match. The digitized image of the results in this case were manipulated at the Microdiagnostic’s laboratory to cut off certain information, and may have been done to enhance or subtract bands. Dr. Baum was asked:

- Q. If there is no photograph, what is the analyst left to look at in order to render his calls of the STRs?
- A. According to their protocol, they take what is called a tracing of it. They take a digitized image and they print it out on a piece of paper, but that’s not the original photograph of what the gel looked like.
- Q. And if there isn’t - - if there’s no photograph, is the digitized image the only thing that the analyst has to look at?
- A. Yes.
- Q. Can those be manipulated, Doctor?
- A. They have been manipulated in this - - they can be manipulated and they were manipulated in this case.
- Q. How do you know they were manipulated in this case?
- A. Because I saw the gels, and the digitized image that was printed out did not include the entire gel, which means they used the computer to manipulate and cut off part of the image.

- Q. Can the exposure on that computer digitized image be adjusted to show fainter or darker bands?
- A. Yes, it can be.
- Q. And, Doctor, I'm showing you what's been marked as State's Exhibit 10. Are these the computer images that we're speaking of?
- A. Yes, they are.
- Q. Why does that leave you reason for concern?
- A. Leaves me reason for concern because they've been manip -- since I already know they've been manipulated by cutting off part of that, I don't know what's been manipulated with enhancing or subtracting bands. So, I don't know if I'm seeing the entire gel, especially since there's no photograph for one of those computer images, the darker one, which is No. 7.
- Q. And, for the record, that is the computer printout of the evidence alone?
- A. That is.
- Q. Can you tell from looking at that document whether that corresponds to gel loading worksheet 97262 or 269?
- A. Doesn't look like it corresponds to either.
- Q. Why would that be?
- A. Okay. Let me just get the two gel loading worksheets. 26 -- okay. 269 includes other samples, Thomas F., Grace F. [these two are not involved in this case], and I don't see those here. 279 includes Murray and Taylor which are missing.
- Q. Okay. So, you don't -- do you have any documentation of a gel loading worksheet to match this digitized printout?
- A. Not the entire digitized printout and Joe Warren's documentation has a -- one second. Let me get ahold of that -- has 262 which is even a different number. So, it not --

- Q. If I was to - - if I were to tell you that gel 262 broke and the information was - - and the gel was reloaded on 269, would that change your opinion in any way?
- A. Then Joe Warren's documentation is wrong because he says 262 in the top of it. So, now I'm very - - very confused because he wrote - - he wrote types for a gel that doesn't exist. He should have changed the number on the gel ID if that's what happened.
- Q. So, if it was just assumed for a moment, Doctor, just assume for a moment, that it is a typographical error and that this gel ID should say 97269, does it give you any other reason for concern?
- A. Yes, it - - yes, it does. Besides the fact, I should add, that it's standard practice to put the gel ID numbers on each of the printouts. Those are missing so you can't compare it to the worksheets. I mean, I have no confusion if he actually had the printout with the gel ID numbers on there, but there is concern because, for instance, Joe Warren did not see an 8 for the TPOX, which is reported out later. So, I do have concern with that.

But, as I said, it would have been standard and good practice so you can compare all the documentation to put ID numbers so you know what you're looking at and have a paper trail and an audit.

(R.4240, L2 through R.4243, L19) (emphasis added).

Joe Warren, who did the testing did not see an 8 at TPOX:

there is no photograph of the actual gel; then, Mr. Deguglielmo reports an 8, in an effort to produce a mixture of Murray and Vest. It appears only too convenient that a crucial photograph is missing, the digitized image has been manipulated, information is cut off, the gel ID numbers are not on the printout, and the calls change to add an 8, so as to include Murray. Perhaps, this is the explanation for all the fainters that Mr. Deguglielmo called and Mr. Warren did not see.

Therefore, it is clear that the image has been manipulated to fit the facts of this case. The unaccredited Microdiagnostic's laboratory clearly has not implemented the "scientific rigors" mandated by this Court in the field of DNA testing.

VI. MICRODIAGNOSTICS DID NOT FOLLOW THEIR OWN PROTOCOL

Further, the lab analyst and the State's expert in this case, did not even follow Microdiagnostics' own protocol as it pertains to photographing the strips. The protocol requires: "[f]ollowing photography, the strips should be stored wet until photographys (sic) are developed." Dr. Baum testified that that instruction means, "you should be comparing the photographs to the strip and if they were, they would [the lab analysts] notice they didn't have positive controls photographed. So, they did not follow their own protocol with a positive and negative controls for photographing positive and negative controls." (R.4247, L7-12)(emphasis added). Even Mr. Deguglielmo testified there were no photographs of the positive and negative controls on the polymarker. (R.3896). And, there is no photograph of gel number 97-269. (R.3897).

Dr. Baum inspects other laboratories as part of his employment with the City of New York and testified that, when reviewing the work of another lab he looks at the photographs because the strips can fade within hours of being developed and the photograph is the only permanent record. (R.4237, L18-22).

When asked if there would be a concern if the strips were not photographed

immediately he testified:

- A. Yes, I would have tremendous concern if it were several hours. The strips have to be viewed immediately because they will fade right away when exposed to light or exposed to even just the air, no matter how they're preserved. The strips will fade right away. That's why you have to look at the photographs or if the strips are examined immediately, not at any later time period.

(R.4238, L19-25; R.4239, L1). Mr. Deguglielmo was asked at trial “...when it was run, on September 22nd of '97, correct, according to Mr. Warren's worksheets? Yes ma'am. However, you testified that you looked at the strips either September 24th, 25th, or 26th because your notes are not dated, isn't that right? To which he responded, “I honestly don't know what I testified to. I looked at it after they were done.” (Vol.34, P.1406)(emphasis supplied).

Dr. Baum went on to note:

- A. And, in addition, Mr. Deguglielmo did not follow his [own] protocol. He did not take adequate photographs of the hairs. The protocol says keep them wet, take adequate photographs. And the photographs were taken at an angle so you couldn't even read the entire photographs.
- Q. How should the photographs that were taken - - how should they have been taken?
- A. They should have been taken straight down with the camera back, parallel to the surface of the plane of the - - of where the strips were and they should have been taken close-up and so you can read all the writing on the strips.

Mr. Deguglielmo took them at an angle so you couldn't read all the preprinted numbers or even his writing on some of the strips you couldn't see all the dots. So, he didn't preserve an adequate records of the strips.

- Q. Was there another problem with the photographs, to your

recollection?

- A. Yes, the photographs also had what I call a blue haze which is too much chromogen. So, there was a high blue background and it was obscuring the presence of some dots so you couldn't even tell whether a dot - - if a dot was present, you couldn't even tell if it was there.
- Q. And what about Mr. Deguglielmo's explanations that that was just the difference in exposures in the development of the film that caused that haze?
- A. First of all, I hadn't heard that explanation before, but, no, that's from too much chromogen and not adequately washing the strips. He obviously - - you're supposed to - - you add the chromogen, the dots turn blue and you have to wash away the excess. Those strips were not washed thoroughly enough to get rid of the excess chromogen.

(R.4234-4235)(emphasis supplied).

As to determining whether there was a faint C or a faint S dot. It is clear those steps were not taken when reviewing the testimony of Dr. Baum which follows:

- Q. What is your opinion regarding the results of this test as far as being inconclusive?
- A. These tests are inconclusive because of all the errors that I've noted and because they do not explain what happened and also I do not see the C dot and the S dots in all the strips.
- Q. And the C dot and the S dot are what, Doctor?
- A. Those are minimum thresholds. In order for a test to be valid, all the dots have to be greater than or equal in intensity to the C dot or the S dot. That's what the manufacturer states and C and S dots have to be visible. If they're not visible, the test is inconclusive.
- Q. So, even if everything was done incorrectly, you still have to have those threshold C and S dots, correct?

A. That's correct.

Q. And do you have a problem with that in this case?

A. Yes, I do not see the C and S dots on the photographs.

Q. Therefore, what does that lead you to conclude about the results in this case?

A. They're inconclusive, but they're also unreliable because you don't have the threshold.

(R.4257, L6 through R.4259, L11) (emphasis supplied).

Q. And how much weight would you give to the opinion of the man who actually performed the test?

A. I would give actually a lot of weight to it because he was there and he knows what happened with the test and he knows if there were any problems with the test.

Q. And if you were told that Mr. Warren said this should be deemed inconclusive, how would you feel about that?

A. Then it should be deemed inconclusive. He performed the test.

(R.4260, L12-22).

Mr. Deguglielmo testified that quantitation is done to verify there is not too much DNA, because too much DNA can give unreliable results (R.3903 L1-3). And, if there is too much DNA, fainter bands may show up (R.3909 L19-22). After much debate, Mr. Deguglielmo testified at trial that quantitation is not optional as a matter of routine, and that is why it was actually in is protocol at the time of the Frye, hearing, and at trial. (Vol.34, P.1390).

Mr. Deguglielmo testified that quantitation is in Microdiagnostics' protocol, FBI protocol and TWGDAM guidelines, yet, he did not do so. (R.3904, L17-18). Further,

he testified that secondary bands were present but were not recorded. (R.3910, L19-21).

Q. Now, isn't it true that if you have too much DNA you can also get unreliable results?

A. That's correct. I believe I testified to that when we were discussing the quantitation.

Q. And I believe you stated that you did not do quantitation on the evidence, correct?

A. That's correct.

Q. And the reason you didn't do quantitation on the evidence was because you felt that there would not be enough DNA, correct?

A. Because I knew that the sample would be marginal, that's correct.

Q. You didn't do DNA on the known standards either, correct?

A. That's correct.

Q. You had plenty of DNA there, didn't you?

A. Yes.

Q. So you just chose not to do that, correct?

A. Correct.

Q. Quantitation is in your protocol, is it not?

A. It is.

Q. It's in the FBI protocol, isn't it?

A. I would expect so, yes.

Q. And it's also in the TWGDAM protocol, isn't it.

A. TWGDAM doesn't have a protocol but - -

Q. Isn't it in TWGDAM's guidelines?

A. It is in the guidelines, that's correct.

(R.3903, L1 through R.3905, L5).

Dr. Baum testified about the failure to do quantitation as required by Microdiagnostics protocol, FBI protocol, and the TWGDAM guidelines:

Q. What about the lack of quantitation, Doctor? Would that have an effect on whether or not there were fainter bands?

A. Yes. None of the - - all these tests should be quantitated before amplification, the amount of DNA, and these were not quantitated and that also could produce fainter bands. It could be too much DNA at some point or too little, and that would be a problem.

Q. What about, Doctor, if he said he didn't have enough DNA to use on the evidence?

A. He still had enough on the known samples and he didn't perform quantitation on the known samples where there was definitely enough DNA and even the evidence, quantitation takes less than one-tenth of the sample. So, there is enough always for a quantitation and it should have been performed.

Q. And because it was not performed, does that lead you to conclude anything about this test?

A. It also makes them unreliable and inconclusive.

(R.4228, L1-22) (emphasis supplied).

This is yet another situation in which unaccredited Microdiagnostics violated numerous protocols, including their own. This is yet another situation in which the State's expert attempts to mislead the Trial Court by alleging he did not have enough sample quantitation. Quantitation takes one tenth of the sample, if one assumes that his explanation is plausible, he can offer absolutely no explanation for failing to conduct quantitation on the known samples.

Most interestingly, Mr. Deguglielmo testified that he is not saying that hairs B-3 and B-4 are Mr. Murray's, even if all nine loci were to match up. (R.3329-30, L.22-13). However, he then testified that the "secondary type is consistent with Alice Vest." (R.3330, L.18-19). This raises the important questions, if all nine loci matched up in the DNA are not Murray or Vest, then whose is it?

Appellant respectfully submits this is all "Monday Morning Quarterbacking." The State's expert attempts to explain away the failure to do quantitation but can not fully do so, he attempts to explain away the lack of substrate shaft control but can not do so, he attempts to explain away the need for an independent review by testifying that there was no disagreement, but can not do so. In fairness to the State, perhaps the State of Florida was unaware that they were sending this critical evidence to a laboratory that was not fully accredited. These excuses simply do not reflect the "scientific rigors" mandated by this Court in the field of DNA testing.

This Court has stated that DNA evidence requires the "scientific rigors" of the NRC, and other accepted disciplines, be met before any such evidence may be submitted to a jury. In the instant case, while the Trial Court did conduct a lengthy and detailed hearing to determine whether the "scientific rigors" required under all accepted DNA testing procedures in the scientific community were complied with, the Court ignored violation after violation of incredibly important "scientific rigors." Violations which were so gross and pervasive as to render the entire testing procedures, and results, in the instant case inadmissible as a matter of law.

This Court first considered the admissibility of DNA evidence in Hayes v. State, 660 So.2d 257 (Fla. 1995). There, this Court ruled that before DNA evidence is

admissible, certain standards must be met. Accordingly, before DNA evidence is admissible, the trial judge must first determine whether the:

1. Expert testimony will assist the jury in understanding the evidence or in determining a fact in issue;
2. The expert's testimony is based on a scientific principle or discovery that is "sufficiently established to have gained general acceptance in the particular field in which it belongs" under the Frye test; and
3. The particular expert witness is qualified to present opinion evidence on the subject in issue.

Frye v. United States, 293 F. 1013, 1014 (D.C. Cir. 1923).

If the answer to these three questions is in the affirmative, the trial judge may proceed to step 4, and allow the expert to present an opinion to the jury. The jury then determines the credibility of the expert's opinion, which the jury is free to either accept or reject. Hayes, 660 So. 2d at 262.

In determining whether DNA evidence meets the requirements of Frye, this Court recognized that "the admissibility of DNA evidence was an issue of considerable interest and concern in the courts throughout the United States." Hayes, 660 So. 2d at 262. The Court also recognized the importance of the report that was issued in 1992 by the National Research Council "NRC", of the National Academy of Sciences. The first report was to establish and recommend accepted standards within the scientific community regarding procedures and methodologies to be use to ensure reliable results where DNA testing was concerned.

In Hayes, this Court specifically recognized the importance of the work of Victor

M. McKusick, *Preface* to Committee on DNA Technology in Forensic Sciences, National Academy of Sciences, *DNA Technology in Forensic Science* at vii (1992). Hayes, 660 So. 2d at 262. This Court heavily relied upon the NRC Report, published in 1992, noting, “[t]he National Research Council emphasized the importance of the scientific testing methods used in DNA typing and that:

Forensic DNA analysis should be governed by the highest standards of scientific rigor in analysis and interpretation. Such high standards are appropriate for two reasons: the probative power of DNA typing can be so great that it can outweigh all other evidence in a trial; and the procedures for DNA typing are complex, and judges and juries cannot properly weigh and evaluate conclusions based on different standards of rigor.

Id. at 262 (emphasis added).

The testing in this case did not adhere to the highest DNA standards of scientific rigor, and it is exactly for this reason that this case must be reversed. This Court has been consistent in holding that **both** the testing procedures (method of analysis) and application of the testing results statistical application must meet the requirements of Frye. However, most of the reported cases in Florida have only addressed the issues of the statistical analysis portion of the results, as opposed to the testing procedures and methodologies that were used utilized in determining the DNA type of the sample.

This case is squarely focused on the procedures that were used during the PCR process, and the multiple ways in which NRC recommendations and accepted scientific testing procedures were violated. Thus, rendering the DNA testing in this case inconclusive and unreliable. As such, the statistical frequencies which give significance to the results are misleading, meaningless, and irrelevant because the test results themselves are unreliable and inconclusive.

In Hayes, this Court relied heavily upon the NRC Report, and the importance of the testing protocol specified therein. The Report emphasized that the application of the Frye, test to the testing procedures “utilized in this complex process” and stated that “a court should recognize that the expertise of more than one discipline might be necessary to explain [the procedures]”.

Id. at 263.

This Court specified four “pertinent assumptions” contained in the NRC Report, and adopted those assumptions. Assumption 1 dealt with the uniqueness of any person’s DNA. Assumption 2 concerned the validity of procedures for extracting DNA from samples of blood, semen, and other materials, and analyzing it for the presence and size of polymorphisms. This Court noted:

With regard to the application in forensic science, however, additional questions of reliability are raised. For example, forensic DNA analysis frequently involves the use of small, possibly contaminated samples of unknown origin, such as a dried blood stain on a piece of clothing. Some experts have questioned the reliability of DNA analysis of samples subjected to “crime scene” conditions. In addition (as noted in Chapters 2 and 3), the details of the particular techniques used to perform DNA typing and to resolve ambiguities evoke a host of methodological questions. It is usually appropriate to evaluate these matters case by case in accordance with the standards and cautions contained in earlier portions of this report, rather than generally excluding DNA evidence. Of particular importance, once such a system of quality assurance is established would be a demonstration that the involved laboratory is appropriately accredited and is personnel certified.

Id. at 263 (emphasis added).

Assumption 3 concerned the adequacy of statistical data banks used to calculate matched probability, which is not the subject of this appeal. However, Assumption 4 is squarely the focus of this appeal. As this court noted in Hayes,

*The validity of Assumption 4 – that the analytical work done for a particular trial comports with proper procedure – can be resolved only case by case and is always open to question, even if the general reliability of DNA typing is fully accepted in the scientific community. **The DNA evidence should not be admissible if the proper procedures were not followed.** Moreover, even if a court finds DNA evidence admissible because proper procedures were followed, the probative force of the evidence will depend on the quality of the Laboratory work. More control can be exercised by the court in deciding whether the general practices in the laboratory or the theories that a laboratory uses accord with acceptable scientific standards. **Even if the general scientific principles and techniques are accepted by experts in the field, the same experts could testify that the work done in a particular case was so flawed that the court should decide that, under Frye, the jury should not hear the evidence.***

Id. 263, and NRC at 133-134 (emphasis added).

Accordingly, this Court has already established that the trial judge must make a step-by-step inquiry, and find as a matter of law that the testing procedures complied with the “scientific rigors” of those methods accepted in the scientific community for such DNA testing. While the Trial Court in this case, during its week long Frye hearing, did in fact conduct the required step-by-step inquiry, the court impermissibly ignored the multiple and blatantly gross violations of the proper methods that must be followed during the procedure before the scientific community will deem the results acceptable, and left the determination to the jury.

In the present case, it is clear the State failed to demonstrate the reliability of the PCR process utilized. The general scientific community that holds the knowledge and expertise to evaluate the procedures and methods that are used in DNA testing have

collectively agreed that in order for the results to be reliable, certain safeguards must be followed during the process to ensure the integrity of the test. The unanimous voice of the scientific community is that the results must be accepted as reliable by the larger scientific community and not by a single analyst who has an interest in the case. (The NRC, ASCLAB, Microdiagnostics' Protocol, and the TWGDAM guidelines and recommendations, all mandate an independent review be performed and require that review prior to a report being issued). This rule must be followed, before the scientific community will accept the results as reliable.

This Court dealt with the issue of DNA testing in the case of Henyard v. State, *supra*, which provides the basis for reversal of this case. In Henyard, the Defendant argued that the trial court abused its discretion in admitting DNA evidence at trial because the State failed to establish a proper predicate of reliability for the DNA testing procedures employed by the Florida Department of Law Enforcement (FDLE). The Defendant contended that the FDLE testing procedures were unreliable because; (1) the laboratory was not in compliance with the recommendations of the National Research Council in its report on DNA testing and methodology, and (2) the only person who testified as to the reliability of the testing procedures utilized by the FDLE was the FDLE employee who conducted the tests. Henyard v. State, 689 So.2d 239 (Fla. 1996).

This Court noted:

In this case, the trial court conducted a Frye hearing as to the admissibility of the DNA tests and results prior to trial. Evidence offered at the hearing established that: (1) FDLE's DNA analysis in this case was conducted pursuant to the Restriction Fragment Length Polymorphisms (RFLP) method; (2) the RFLP method is accepted in the scientific community; (3) the NRC report does not question the validity of the RFLP process; (4) FDLE analysts are subject to routine proficiency testing, and the analyst

in this case has never failed a proficiency test; and finally (5) FDLE has in place written quality control procedures which are consistent with NRC recommendations.

Id. at 249.

Accordingly, this Court ruled that the trial court did not abuse its discretion in admitting the results of the FDLE's DNA analysis at trial, because there was no evidence that the subject DNA testing procedures did not comply with the FDLE requirements. In other words, while the testing procedures may not have met NRC standards, the subject testing procedures **did meet** FDLE standards, and those standards are recognized as generally accepted in the scientific community. However, it is obvious from Hayes, and Henyard, that if there is evidence that the testing procedures implemented in any case **do not** comply with the testing procedures recognized within the scientific community, the results of those testing procedures must not be admitted at trial.

In Brim v. State, 695 So.2d 268 (Fla. 1997), this Court ruled as a matter of law that the techniques and methods utilized in **both** steps of the DNA testing process must satisfy the Frye test. Accordingly, there is no question but that the testing procedures, as well as the application of statistical principles to those test results must each satisfy the requirements of Frye.

It is important to note that this Court again cited the 1996 NRC Report as the ultimate authority on the issue which would decide the admissibility of DNA testing. In fact, it was because the record in Brim failed to show **complete details** of the State's calculation methods, this Court could not properly evaluate whether the State's

population frequency statistics would satisfy the Frye test in 1996 as compared with the 1996 NRC Report. Accordingly, this Court required that an evidentiary hearing be conducted which specifically took the 1996 NRC Report into account. Based on the testimony in this case, this court cannot properly evaluate the testing done because the record fails to show complete details of the testing.

This Court next dealt with the DNA issue in this very case. This Court reversed Mr. Murray's conviction based on the clear error that occurred at trial regarding the procedure implemented by the trial Court in admitting the DNA evidence. This Court ruled that "[u]nder the *de novo* standard of review we have in this area of law, we find that the evidence proffered by the State here **falls far short of all three requirements** set out in Ramirez, for the admission at trial of expert testimony concerning a new or novel scientific principal like DNA." Murray, *supra* at 164.(emphasis added).

In Murray, this Court noted the crucial importance of the DNA evidence in this case "in light of the fact that Murray was eliminated as the donor of all the other seminal and blood stains found at the crime scene." A detailed analysis of the procedure implemented by the Court to admit the subject DNA was conducted.

This Court based its reversal on the fact that the trial judge admitted the subject testing, ruling that it was a matter of weight rather than admissibility. On that issue, this Court again emphasized that:

[T]he burden is on the proponent of the evidence to prove the general acceptance of both the underlying scientific principle and the testing procedures used to apply that principle to the facts of the case at hand. The trial judge has the sole responsibility to determine this question.

Id. at 161. This is the exact error the Trial Court made in this

case.

This Court then reiterated the step-by-step analysis “that a trial court must make before admitting into evidence the testimony of an expert witness concerning a new scientific principle.” The Court then restated the Frye, analysis, which is without question appropriate to the facts of the instant case.

Next, the Court reiterated its decision in Brim, and restated that both the methodology for determining DNA profiles, as well as the statistical calculations used to report the test results are subject to the Frye, test. In fact, because this Court felt that its decision in Brim, was “so critical to the issues before us in this case, the substance of that opinion warrants extensive reiteration again today.” The Court then engaged in a lengthy analysis of its decision in Brim. After doing so, the Court ruled:

Under our case law then, the resolution of the case before us is an easy one. Here, the trial judge failed to conduct the step-by-step inquiry set out in *Ramirez* as to whether either the PCR method of DNA typing used by the State’s expert, or the probability calculations used to report the test results, could be admitted at trial – **a determination that was his alone to make**. Instead, the trial court simply allowed the DNA evidence to be admitted at trial under the faulty rationale that the scientific principles underlying this evidence was more appropriately resolved by the jury as a “matter of weight.” It is exactly this mistake which we have cautioned trial judges not to make. As we explained in *Ramirez* and *Brim*, and emphasize again today, “[T]he burden is on the proponent of the evidence to prove the general acceptance of both the underlying scientific principle and the testing procedures used to apply that principle to the facts at hand. The trial judge has the sole responsibility to determine this question.”

Id. at 163.(emphasis added).

This Court then ruled that the trial court’s failure to make a determination as to the admissibility of this evidence was “clearly error under our case law.” Further, this Court ruled that because of the lack of information regarding the application of the

methodology to the DNA evidence at issue led to the inescapable conclusion that “even if the trial court had attempted to determine whether this evidence met the Frye, standard, there is no way the court could have found it admissible.” Id. at 163. The Trial Court in the instant case made the same error, by ruling that the underlying principles could be argued to the jury.

V.

THE TRIAL COURT COMMITTED REVERSIBLE ERROR BY ALLOWING THE STATE TO INTRODUCE EVIDENCE REGARDING MR. MURRAY'S COLLATERAL CRIMES TO SHOW BAD CHARACTER OR PROPENSITY TO COMMIT BAD ACTS.

Despite Defense counsel's objections and motions, the Trial Court permitted the State to introduce evidence of Mr. Murray's collateral crimes or bad acts. The sole reason for permitting such evidence was to show that Mr. Murray had a propensity for committing crimes or of bad character. The introduction of the evidence was error and prejudiced Mr. Murray's case such that his conviction requires reversal.

Section 90.404(2)(a) reads as follows:

(a) Similar fact evidence of other crimes, wrongs, or acts is admissible when relevant to prove a material fact in issue, such as proof of motive, opportunity, intent, preparation, plan, knowledge, identity, or absence of mistake or accident, but it is inadmissible when the evidence is relevant solely to prove bad character or propensity.

Mr. Murray moved to exclude collateral crimes evidence, specifically his November 22, 1992 escape from the Duval County Jail. The motion was denied by the

Trial Court. Accordingly, the State called various witnesses to testify that the Defendant had escaped from the Duval County Jail pending his trial for murder. Specifically, the State called Sergeant Sharon Freeland of the Jacksonville Sheriff's Office, who testified that Mr. Murray was missing from the jail on November 22, 1992, and was returned on September 18, 1993, from Las Vegas. (Vol.35, P.1592-1593). Patrolman Dale H. Groves stated that when he conducted roll call at the Duval County Jail on November 22, 1992, Mr. Murray did not answer, as he had escaped. (Vol.35, P.1595). Sergeant Thomas E. Powell testified that he was notified that Mr. Murray was missing on November 22, 1992, and followed normal procedures to locate him but was unsuccessful. (Vol.35, P.1598). Anthony M. Smith, then an inmate at Duval County Jail, stated that he had escaped with Mr. Murray. (Vol.35, P.1603).

Also, Mr. Murray moved to exclude evidence of the alleged false identification card and Social Security card seized when Mr. Murray was arrested in Las Vegas. (Vol.35, P.1572-1588). This motion, too, was denied.

"Evidence of collateral crimes, wrongs, or acts committed by the Defendant is inadmissible if its sole relevancy is to establish bad character or propensity of the accused." Castro v. State, 547 So.2d 111, 114 (Fla. 1989), quoting, Williams v. State, 110 So.2d 654 (Fla. 1959). Under the so-called Williams rule, such evidence is admissible if it is relevant to a material fact in issue. Cyubak v. State, 570 So.2d 925, 928 (Fla. 1990). Therefore, the test for admissibility of collateral crimes evidence is relevancy. Heiney v. State, 477 So.2d 210, 213 (Fla. 1984); Hall v. State, 403 So.2d 1321 (Fla. 1981); Ruffin v. State, 397 So.2d 277, 279 (Fla. 1981). Significantly, the State has the burden of establishing a relevant connection. See State v. Norris, 168

So.2d 541 (Fla. 1964); Jackson v. State, 403 So.2d 1063 (Fla. 4th DCA 1981).

In the instant case, the testimony and evidence offered lacked relevance to any material fact at issue. Mr. Murray's state of mind over two years after the alleged offense is irrelevant to the essential elements of murder, burglary, or sexual battery especially when considering the fact that he was incarcerated on another charge at the time. A charge that he was contesting. It should be pointed out that Murray became aware that his hair allegedly matched microscopically to those found at the scene during the trial of Taylor. (R.1496). If he had a guilty conscious he would have fled then.

This Court in Cyubak v. State, *supra* recognized and held that the fact that the accused was an escapee did not have any relevance to any material fact at issue in his murder trial. Therefore, testimony to establish Mr. Murray's mental state or consciousness was irrelevant and should not have been admitted. Similarly, the evidence regarding the false identification card and Social Security card was irrelevant to any material fact at issue. The only discernable purpose for the testimony in evidence was to establish bad character and propensity for committing bad acts. Accordingly, the evidence was erroneously admitted. Cyubak v. State, 570 So.2d 925, 928 (Fla. 1990).

The Trial Court's error was prejudicial and requires that the conviction be reversed. The erroneous admission of collateral crimes evidence is presumptively harmful. Castro, *supra*; Peek v. State, 488 So.2d 52 (Fla. 1986); Straight v. State, 397 So.2d 903 (Fla. 1981). The danger lies in the fact that the jury will take the accused's bad character or propensity to commit crime as evidence of guilt of the crime charged. Castro, *supra*; Straight, *supra*. The rationale underlying the Williams rule is that such evidence,

would go far to convince men of ordinary intelligence that the Defendant was probably guilty of the crime charged. But, the criminal law departs from the standard of the ordinary in that it requires proof of a particular crime. Where evidence has no relevancy except as to character and propensity of the Defendant to commit the crime charged, it must be excluded.

Jackson v. State, 451 So.2d 458, 461 (Fla. 1984), quoting, Paul v. State, 340 So.2d 1249, 1250 (Fla. 3d DCA 1976).

As there was error in admitting the evidence, the State has the burden of showing that the error was harmless beyond a reasonable doubt. State v. DiGuilio, 491 So.2d 1129, 1135 (Fla. 1986). Such error of committing collateral crimes evidence is presumptively harmful and cannot be overcome even by the State showing that the evidence against the accused is overwhelming. Castro, *supra* at 115. Rather, the State must prove that the verdict could not have been affected, beyond a reasonable doubt, by the error. Ciccarelli v. State, 531 So.2d 129, 132 (Fla. 1988). Indeed, the State will not be able to meet such a high standard. In its closing argument, the State actually stressed a number of Mr. Murray's collateral crimes and offenses:

[y]ou heard evidence then of the escape from the Duval County Jail, now, that's relevant because it shows consciousness of guilt. That is the Defendant realizing he's guilty, escapes to try to get away from it. He didn't want to be held accountable for the actions of September 15th, September 16, 1990.

You then heard also evidence that he was arrested in Las Vegas by Special Agent David Kerns from the FBI and he testified about when he arrested the Defendant along with other FBI agents, how they found him and he had a fake ID under the name of Doyle White. You recall that Ms. White's son's name, Juanita White. That was the same name he was using. He had false ID, a check cashing card and also a Social Security card.

(Vol. 41, P.2407). The State continued in its closing argument by contending:

[t]he fact that they [Mr. Murray and Mr. Smith], that is he escaped with Smith. A consciousness of guilt. Doesn't want to be held accountable as he is being held accountable at this time and you all are participating in that process. Statements to Smith while out and then arrested [in] Las Vegas.

(Vol. 41, P.2406-2407). Because the State improperly emphasized to the jury that Mr. Murray had committed other bad acts, it will be unable to establish harmless error.

In light of this denial, Mr. Murray, short of testifying himself, was given no opportunity to present evidence to explain his flight. Mr. Murray's defense was severely prejudiced, the State of Florida did not establish a nexus between the flight and the charges, thus, his conviction should therefore be reversed.

**VI.
THE TRIAL COURT ERRED IN DENYING
DEFENDANT'S MOTION TO EXCLUDE ANY AND
ALL HAIR EVIDENCE DUE TO ITS DESTRUCTION
BY THE STATE OF FLORIDA IN VIOLATION OF
THE TRIAL COURT'S ORDER.**

The Trial Court erred in denying Defendant's motion to exclude any and all hair evidence due to its destruction by the State of Florida. (Vol.28, P.372). The prior Trial Court, through the Honorable Judge Stetson, stated on the Record on August 27, 1997 "Okay we have addressed this previously. The Court Ordered, at the request of the Defendant, that the State require the expert that he uses as little of it as reasonably possible and try to preserve whatever surplus may remain". (R. 759)(emphasis supplied).

That Order was violated and is evidenced by the testimony of the State's expert,

Mr. Deguglielmo who telephoned the Assistant State Attorney, and asked what he should do with the sample. (R.3386). Instead of following the Court's order, the Assistant State Attorney told Mr. Deguglielmo to, "do what [he] needed to do to obtain as much information and a reliable result as possible." (R.3386). While that comment seems reasonable it is misleading. The State did not advise Mr. Deguglielmo of the Trial Court's Order, and Mr. Deguglielmo then testified that "... We therefore, took half the sample and did two amplifications ..." Id.

When pressed harder on that conversation Mr. Deguglielmo was asked, "And wasn't the gist of the conversation, 'do you want me to continue or do you want me to turn over the other half to the defense'?" To which Mr. Deguglielmo responds, "No. As I told you – I know at least twice now – by the time I had that conversation, all the amplifications had been done." (R.3388). Which was it? Was it, I had the conversation, and therefore did two amplifications, or was it, by the time I had that conversation all the amplifications had been done? The excuses given are irrelevant, the Trial Court Ordered the testing done in a manner that would allow for defense testing and that Order was ignored by the State and the State's expert.

Mr. Deguglielmo testified he used one half of the sample for the first round of testing yet, the other half was not saved for the defense. If Mr. Deguglielmo needed to do additional testing, he could have divided the sample into thirds, not halves. That would have allowed for less than a seventeen percent difference, from fifty percent to thirty-three and one-third percent. The Defense was given none to test. At trial Mr. Deguglielmo testified that "...we used 50 percent of the sample to do an amplification for CTT. That set of STR's, that amplified DNA can be run a number of times, that

amplified DNA can be run a number of times. There will be enough DNA there to load at least five, maybe ten different gels, depending on the amount of DNA that we load on the gel.” (Vol.33, P.1327). The State’s expert appears to be misleading the Trial Court on the amount of DNA available. (Compare this section to that in Section IV, wherein Mr. Deguglielmo testified there was not enough DNA to do quantitation).

Mr. Deguglielmo seemed to even make light of the initial DNA test that consumed the first fifty percent of the DNA. He testified that “I’ve told you this was a preliminary gel. The only reason for even running this gel was to see if there was going to be a result and we knew from the very beginning we would run it again with the standards.” (Vol.33, P.1327) (emphasis supplied).

Appellant respectfully submits that the type of testing conducted by the unaccredited Microdiagnostics laboratory is exactly why more and more courts are requiring evidence be preserved for independent defense testing. It is for these reasons this case should be reversed.

VII.

THE EVIDENCE WAS INSUFFICIENT TO CONVICT GERALD MURRAY OF THE OFFENSES CHARGED.

At the end of the State's presentation of this case, Gerald Murray moved for judgment of acquittal as to all counts because the State had failed to prove a prima facie case as to the essential elements of the offenses charged. (Vol.37, P.1750-1757). The trial court denied the motion. (Vol.37, P.1750-1757). Mr. Murray's counsel renewed the Motion for Judgment of Acquittal at the end of the presentation of the defense's case

and was denied by the trial judge. (Vol.39, P.2201-2212).

The Trial Court erred in not granting the Motions for Judgment of Acquittal as the State failed to offer sufficient evidence to establish a prima facie case of first degree murder, burglary with an assault, and sexual battery. Each of the counts implicitly requires that the accused be present to participate in those crimes. However, the only evidence that the State was able to offer to establish Mr. Murray's presence is two hairs, which should have been suppressed, and the incredible, impeached testimony of a jailhouse snitch. Neither fingerprints taken nor semen samples collected at the crime scene placed Mr. Murray there. (Vol.31, P.948-949). This evidence is insufficient to establish Mr. Murray's presence or participation in the alleged crimes.

The State's hair and fiber expert Mr. Dizinno, could not discount the possibility that the hair from the crime scene may have come from someone other than Mr. Murray. He also could not absolutely, positively identify the hair taken from the crime scene as belonging to Mr. Murray. That is so because hair analysis is not like a fingerprint. (Vol.32, P.1059).

The only other evidence the State offered to establish Mr. Murray's participation was the testimony of Anthony Smith, an inmate Mr. Murray had allegedly made incriminating statements to. (Vol.35, P.1676). As a result, that inmate was granted great leniency in his own case. Leniency so great that the State of Florida agreed to waive the death penalty. That testimony came from a man who testified that his life was not important to him. (Vol.36,P.1663).

It is well settled that “[w]hen the state relies on circumstantial evidence, the circumstances, when taken together, must be of a conclusive nature and tendency,

leading on the whole to a reasonable and moral certainty that the accused and no else committed the offense charged.” Owens v. State, 432 So. 2d at 581. “Even if the hair evidence were as positive as a fingerprint, the state failed to show that the hair could only have been placed on the victim during the commission of the crime.” Hortsman v. State, 530 So. 2d 370 (Fla. 1988).

Based on this scant and incredible evidence, the State failed to establish a prima facie case against Mr. Murray. His Motions for Judgment of Acquittal should have been granted. Accordingly, the Trial Court's error requires that Mr. Murray's convictions be reversed.

VIII.

THE TRIAL COURT ERRED WHEN IT DENIED DEFENDANT’S MOTION TO COMPEL NAMES OF ATTORNEYS INVOLVED IN DNA CASES ANALYZED ON GEL LOADING WORKSHEET.

The Trial Court erred when it denied Appellant’s motion to compel the names of the attorneys involved in the DNA testing that was done at the same time, on the same gels, and on the same worksheets as Appellant’s. (see States Exhibit 4 Frye Hearing).

As was pointed out in section IV of this brief, there were numerous errors, as well as documents and photographs missing from the DNA testing in this case. It is for these reasons that this Court, and future scientists, cannot make an independent review of the work done. It is important to note that other agencies had submitted samples for DNA testing, and that testing was done at the same time and on the same gels, and results written on the same notes and worksheets as Murray’s. It is clear that this was done

because the documents provided to the defense in this case revealed calls from other donating agencies. Therefore, it is reasonable to conclude that the calls from Murray's case are likewise on the documents provided to the other donating agencies.

Counsel for Appellant repeatedly requested that information as part of the discovery process prior to the trial. (R.3324-26)(R.3396). The Trial Court at one point actually told the State to advise their witness to bring those documents, and the witness did not do so. (R.3405). However, the Trial Court continued to do nothing to assist counsel in his request.

What is particularly disturbing is that the State's expert witness, Mr. Deguglielmo testified that one of the mistakes pointed out by counsel did not effect Murray's case, but it did indeed effect the results of the other agencies and Mr. Deguglielmo failed to notify anyone of the error. (Vol.33, P.1337). Because of the great number of clerical errors, missing steps, missing documents and missing photographs, trial counsel needed to determine if the missing items were turned over to the other agencies that had submitted the samples that were tested with Murray's. As well as to determine if the calls that were made, and delivered to those agencies, matched those testified to by Mr. Deguglielmo. Counsel even suggested that an *in camera* hearing be held to determine the relevancy of such information, that request was denied. (R.3412).

The rules of discovery are very broad in the State of Florida and do not warrant citation. Defense counsel, especially in a First Degree Murder case, is entitled to any and all information that may lead to relevant, admissible evidence. That right was denied. Therefore, this case should be reversed and a new trial ordered.

IX.

THE TRIAL COURT ERRED WHEN IT DENIED DEFENDANT'S MOTION TO SUPPRESS DEFENDANT'S STATEMENTS.

The Trial Court erred when it adopted the prior Court's rulings regarding the suppression of Defendant's statements. The statements stem from an interview between the lead Detective, T.C. O'Steen and Murray. The subject hairs were initially sent to the FBI for microanalysis comparison. The FBI laboratory determined that the hairs found at the scene microscopically matched Murray. That evidence was presented at the trial of Taylor. see Taylor, 630 So. 2d. at 1040.

After the trial of Taylor, the hairs were sent for DNA analysis. They were not preserved for later defense inspection, and all of the hairs were destroyed in the subsequent DNA testing. Therefore, Murray never had the opportunity to inspect or view these hairs that allegedly matched Murray microscopically.

Only after Det. O'Steen was advised that the DNA allegedly matched Murray, did he interview Murray. During that interview he told Murray that the "DNA matched". (R.1491-1499). At that point an interview began in which Murray made certain statements regarding how, if indeed there was a match, his hair may have gotten into the home of Vest. (Vol. 35, P.1522-23).

Counsel made a timely objection pointing out to the Trial Court that the DNA that allegedly "matched", and that prompted the questioning, was deemed inadmissible by this Honorable Court in Murray v. State, *supra*. Therefore, any and all questions, and responses to those questions, should likewise be inadmissible.

The State attempted to side step this issue by arguing to the Trial Court that the hairs matched microscopically, and therefore, the questions and answers should be allowed. Murray was never given the opportunity to contest the alleged microscopic identification, but that simply is not the issue. The issue is what did Det. O'Steen tell Murray that led to the responses. The police report indicated that Det. O'Steen told Murray that the "DNA matched", not that the hair matched microscopically. (Vol. 35, P.1494). It was already public knowledge that the hair allegedly matched Murray microscopically. As stated earlier, it came out during Taylor's trial.

The Trial Court even allowed the State to alter the statement that was actually made to Murray at Trial. (Vol.35, P.1492). The Trial Court's theory in allowing the testimony appears to be that law enforcement officers can lie to a suspect in order to coerce a statement. (Vol.35, P.1493). Understanding that is the status of the law, it is so because defense counsel may then cross-examine the law enforcement officer as to the fact that he indeed lied to, and misled, a suspect into making a statement. The point Murray argues here is that he cannot effectively cross-examine on this issue because he would then open the door to a prior DNA test that allegedly matched Murray.

Even if the jury had heard the DNA test was later deemed inadmissible by this Court, the prejudicial effect would have been enormous. A defendant should not be placed in the position of having to make such a choice, especially when the person who did the original testing, the testing that this Court found inadmissible, misled the initial trial court. see Murray v. State. Therefore, the statements made by Murray should not have been allowed to be placed in front of the jury.

CONCLUSION

For all of the foregoing reasons, the convictions and sentences in this case should be reversed.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished to Carolyn Snurkowski, Assistant Attorney General, The Capitol, Tallahassee, Florida 32399-1050, by mail, this _____ day of June, 2000.

ATTORNEY