IN THE SUPREME COURT OF FLORIDA

ROBERT JAMES BRIM,	:
Petitioner,	:
vs.	:
STATE OF FLORIDA,	:
Respondent.	:

Case No. 85,596

FILED

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DISCRETIONARY REVIEW OF DECISION OF THE DISTRICT COURT OF APPEAL OF FLORIDA SECOND DISTRICT

INITIAL BRIEF OF PETITIONER ON THE MERITS

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PRELIMINARY STATEMENT

This brief on the merits seeks discretionary review of the decision of the Second District Court of Appeal rendered on April 12, 1995. The decision of the lower court certified direct conflict with <u>Vargas v. State</u>, 640 So. 2d 1139 (Fla. 1st DCA 1994), <u>review granted</u>, <u>State v. Vargas</u>, No. 83,935 (oral argument scheduled for August 31, 1995).

Pursuant to Article V, Section (3)(b)(4) of the Florida Constitution and Florida Rule of Appellate Procedure 9.030(a)(2)-(A)(vi), notice to invoke jurisdiction of this Court was filed on April 18, 1995. The Court postponed a decision on jurisdiction and ordered briefing of the case.

The decision in <u>Brim v. State</u>, ______ So. 2d ____, 20 Fla. Law Weekly D932 (Fla. 2d DCA April 12, 1995), is attached as Appendix A. In DCA case no. 93-0863, Mr. Brim went to trial. The DNA evidence used against him, was challenged throughout as inadmissible. In DCA case no. 93-0860, Mr. Brim entered a plea of no contest, specifically reserving his motion to exclude DNA test results and expert testimony of the estimated frequencies of his DNA profile in the population.¹ Record references are to the respective cases, with pleadings and documents preceded by the letter "R" and transcripts preceded by the letter "T." However, the expert testimony on DNA evidence will be referenced by the

¹ In DCA case no. 93-0864, Mr. Brim entered an open plea of no contest to charges of burglary with an assault and misdemeanor battery. No issues were reserved and no. 93-0864 was reviewed below under <u>Anders v. California</u>, 386 U.S. 738 (1967).

letters "ET." The transcript of the expert testimony appears in the record in case no. 93-0863, and this transcript was specifically adopted for record purposes in case no. 93-0860.

STATEMENT OF THE CASE AND FACTS

In case number 93-0863, Mr. Brim was convicted by a jury of burglary of a dwelling with assault or battery, robbery, and two counts of sexual battery. (R223-224) The trial court denied a defense motion to exclude DNA evidence. (R21, R30-184, T131, 365-66, 427, T746-812, T767, T890) In case number 93-0860, Mr. Brim entered a no contest plea to armed burglary and sexual battery, reserving as dispositive the trial court's denial of his motion to exclude DNA evidence. (R13-15, R28-29, T111-113, T143-153)

On the issue of admissibility of the DNA evidence, defense counsel produced scientific literature and judicial authority which raised serious population genetics issues and showed that the FBI and FDLE methods of calculating statistical probabilities was a subject of great disagreement within the scientific community. (#93-0863 - R30-106, 183-184, T746-812; #93-0860 - R28-185, T3-68) The state concurred that a dispute existed within the scientific community concerning the general acceptance of the data bases and population frequency statistics but urged that the evidence was admissible as relevant under any standard. (#93-0863 - T802-803; #93-0860 - T58-59)

The trial court ruled that the relevancy standard was the applicable standard based on <u>Robinson v. State</u>, 610 So. 2d 1289 (Fla. 1992), and found:

. . . they didn't really apply the <u>Frye</u> standard, and I'm going to make that finding for the record and for the appellate court purposes, that I don't believe that the <u>Frye</u> standard is the applicable standard in this case. (#93-0863 - T890; #93-0860 - T146)

... I'm finding that there is a general acceptance of this procedure within the scientific community for various purposes, and that it is reliable. (#93-0863 -T891; #93-0860 - T147)

I am not inclined to hear anything about the data base and the populations that were used, although I read all of that material. That's something you might argue to the jury, but I'm not going to be rehashing that or anything, eliminating the evidence on this basis. (#93-0863 - T892; #93-0860 - T148)

A summary of the expert DNA testimony is as follows: David Baer of the Florida Department of Law Enforcement (FDLE) testified as an expert for the state in DNA testing. (ET329-335) His laboratory received the evidence for DNA testing. (ET336-337, ET360-365) After visual tests proved conclusive, (ET367-373) Baer concluded that the DNA pattern would be present in one out of 1.4 billion white people and one out of 3.5 million black people based on population data bases. (ET374-380)

On cross-examination Baer acknowledged that the FDLE lab was not licensed or accredited to do DNA testing and was not governed by anyone in terms of quality standards. (ET391) A recent National Research Council study, "DNA Technology in Forensic Science," concluded that an important need exists for standardization of lab procedures and for proficiency testing and accreditation before DNA profiling should be used in a forensic or courtroom setting. (ET394) Baer recognized he had no expertise in statistics or population genetics, and his background in molecular biology was limited. (ET396-397) A great deal of controversy exists in the scientific and forensic community concerning the determination of population frequencies, and methods used by the FBI and FDLE in

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compiling its data bases have been criticized as insufficient, including in regard to the black population. (ET397-401) Although the forensic community generally accepted the use of the population frequencies, the scientific community did not. (ET401-411) The Orlando FDLE laboratory only began doing DNA testing in August 1991. (ET417)

Dr. Kevin McElfresh was recognized as an expert in molecular biology and population genetics. (ET428-433) He reviewed the DNA results in Mr. Brim's case, found no indication of error, and agreed with the matches found by FDLE. (ET440-448) He did not have the FDLE data bases, but based on his general knowledge he did a quick qualitative check of the FDLE results and spot-checked some calculations. His calculations agreed with Dr. Baer's. (ET455-456, 458) The match did not mean Mr. Brim was the perpetrator of the crime, but did mean he could not be eliminated as the perpetrator and he was identified as the owner of the sample based on population frequencies. (ET501)

Dr. Laurence Mueller qualified as an expert for the defense in the field of population genetics. (ET517-521) When a DNA profile matches, it means only that the individual has not been excluded. Some weight must then be attached to the match. (ET523) In population genetics, the product rule requires calculations based on two principles -- Hardy-Weinberg equilibrium and linkage equilibrium. (ET533) Each assumption must be verified independently. (ET534-535) The two population data bases used by the FDLE in Mr. Brim's case involved samples of Caucasians in Florida and

samples of blacks from a geographic range including Texas, Florida, and California. (ET535) There is growing concern in the scientific community about errors generated by applying the product rule to very broad groups such as Caucasians or Hispanics; rather, data should be collected from a large number of subgroups of the various populations for comparison. (ET547-549, 557) The National Academy of Sciences also proposed that the "ceiling principle" should be used in forensic cases instead of the product rule. (ET558) Under this principle, each autorad band would be evaluated using fifteen or twenty data bases. Each data base would result in a different number and the largest frequency base value would be applied to each band. (ET559) A single number would then be calculated to determine the probability of finding an individual with the entire genetic ensemble. (ET559-560) The Academy also recommended blind proficiency testing for forensic laboratories so the results could be reported to juries in a quantitative manner. (ET560-562)

Errors in forensic DNA profiling had been made by various organizations. (ET566-573) Additionally, when bands are matched there are intervals of variation of 3.5 percent. The number of other people in the general population with bands which could be declared matches within the 3.5 percent variation to the suspect band must be determined. (ET587-589) Another problem in forensic DNA typing is that bands from duplicate samples, which should be identical in size, actually are not when run on different autorads or gels. (ET591-592)

Dr. Mueller applied the Academy's counting method and ceiling principle to Mr. Brim's case. Using the ceiling principle he reached an estimated frequency of one in approximately 9,000 in the black data base. The counting method resulted in a frequency of one in 960 or less. (ET594-601) Dr. Mueller's review assumed the match was valid but that the evidence should be weighed and interpreted in a much different way than was done. (ET614-615, 626)

In rebuttal, Dr. McElfresh explained the discrepancy between Dr. Baer's and Mueller's probability results as being due to a larger aggregate of data used by Dr. Mueller which would always result in bringing the probability numbers down. (ET632-643)

Other than the DNA evidence, in the trial case, #93-0863, the testimony relating to identification was as follows:

On September 14, 1990, the victim arrived home at approximately 10:45, watched the 11:00 news, and decided to go to bed. (T152) She took a sleeping pill, which she often needed because of a disability to her back caused by a 1971 automobile accident. (T153) Before retiring she opened a window behind her bed to get some fresh air. (T154) She turned off all the lights, and only a candle illuminated her apartment. (T154-155)

The victim thought she heard a noise from upstairs, but then saw a man coming through her window. He grabbed her by the throat and said, "Don't scream. I won't hurt you." (T155-156) She saw and remembered his eyes and his nose. The eyes were almond-shaped; the nose, medium-sized. (T157) The man appeared to be in his late twenties or early thirties, and had long curly hair. (T157)

He wore a tank top and shorts that were a greenish color. (T158) The man said his name was Ernie. (T160) The assailant did not wear gloves. (T189) He was calm and polite and spoke calmly. The victim talked to him to play along in hopes that nothing worse would happen. (T191-192)

She later worked with the police to put together a composite, but the composite did not totally depict the assailant beyond the nose and the eyes. The composite showed a man with a very large, wide nose. (T179, 194-196) Also, she was later shown two photopacks. From the second one she picked two photographs, but did not know if they were the right ones. (T180-182) She picked one where the eyes were similar to those of the assailant, but the detective told her she picked the wrong person. (T182-183) Later he told her she picked the right person. (T183, 185-188) She did not divulge the information to defense counsel earlier because she was not asked at deposition to identify specifically one of the two photographs and she was not asked specifically whether the detective had been in contact with her. (T186-188, 198)

Tampa Police Officer Roosevelt Ratliff, III, received a description of the assailant from the victim. He was described as a black male between ages 20 and 30, about 6-feet one-inch tall, and weighing about 185 pounds. He was dark complexioned with black, curly shoulder-length hair and a mustache, and dressed in dark green shorts and a dark tank top. (T204) During the victim's testimony she denied giving this description to officer Ratliff. (T189-190)

Kevin Williams, a detective with the Tampa Police Department, met with the victim on September 17, 1990 to develop a composite. (T246-247) From his observations, the victim seemed scared and chilled when she saw the final composite. (T250) She gave detective Williams a description of the assailant as five-feet seven to eight-inches tall, between 25 and 30 years old, and with a muscular build. (T250) He did not recall the victim telling him she did not have an opportunity to see anything below the nose of the assailant. (T251)

Tampa detective Jerry Herren interviewed the victim on the afternoon of September 15, 1990. (T256-259) At that time she described her assailant as five-feet seven to nine-inches tall, weighing about 150 pounds, muscular, and with curly hair and a thin mustache. (T256, 262, 285-286) On September 27, 1990, detective Herren showed the victim the first photopack at the Tampa Police Department. (T263) She stated without hesitation that none of the photos depicted the assailant. (T266) On October 9, 1991, Herren presented another photopack to the victim at her residence. She vacillated between two photographs and could not make an identification. (T268-269)

During detective Herren's investigation of the case he received an anonymous call that suggested a person by the name of Ernest, who worked at a restaurant, might be the perpetrator. (T287) The caller said he was the perpetrator. Ernest David Wilson was actually located and met the description given by the victim to Herren. Detective Herren never showed a photopack or any

photograph of Ernest Wilson to the victim. (T288-289) Herren did not recall the name of Keith Malfus, who also fit the description given by the victim, being provided to him by another investigator. (T290-294) Detective Herren did not do a supplement to the second photopack based on the information of the two possible perpetrators. (T303) The victim was unable to make a positive identification from the second photopack, contrary to her testimony in court. (T304-305) Detective Herren never told the victim she picked the wrong photo or later told her she picked the right photo. (T305)

A serology test indicated the perpetrator was a blood-type O secretor. (T314-317) Mr. Brim was determined to be a blood-type O secretor, as is 36-percent of the population. (T314-318)

SUMMARY OF THE ARGUMENT

The test of Frye v. United States, 293 F. 1013 (D.C. Cir. 1923), must be the applicable standard in Florida in cases where the admissibility of DNA evidence is challenged. DNA evidence involves two different sciences. One is molecular biology, or the way in which DNA is tested and matched. The other is the science of population genetics/statistical frequencies that give meaning to The statistical prong of DNA typing is the pivotal the match. element of DNA analysis. It is presented to the jury as scientific evidence. The holding of the Second District Court of Appeal, that this scientific evidence need not meet Frye, and that it should be admissible under a lesser relevancy standard, should be reversed. The Frye test, long established in Florida, is the proper standard to apply to the statistical frequency prong of DNA scientific evidence.

ARGUMENT

<u>ISSUE</u>

WHETHER EXPERT TESTIMONY ON DNA TEST PROCEDURES AND STATISTICAL FREQUENCY POPULATION STATISTICS MUST MEET THE TEST OF <u>FRYE V. UNITED STATES</u>, 293 F. 1013 (D.C. CIR. 1923), TO BE ADMISSIBLE AS SCIENTIFIC EVIDENCE?

In <u>Brim v. State</u>, 20 Fla. L. Weekly D932, 934 (Fla. 2d DCA April 12, 1995), the Second District Court of Appeal concluded that DNA population statistics need not meet the stringent test of <u>Frye</u> <u>v. United States</u>, 293 F. 1013 (D.C. Cir. 1923).² The <u>Brim</u> court recognized that its conclusion conflicts with the conclusion of the First District Court of Appeal in <u>Vargas v. State</u>, 640 So. 2d 1139 (Fla. 1st DCA 1994), <u>review granted</u>, <u>State v. Vargas</u>, No. 83,935 (oral argument scheduled for August 31, 1995). Accordingly, the <u>Brim</u> court certified conflict with <u>Vargas</u>. <u>Brim</u>, 20 Fla. L. Weekly at D934.

At issue in <u>Vargas</u> and <u>Brim</u> is the question of admissibility of DNA profile evidence involving data bases compiled by the FBI and used by the FDLE. The <u>Vargas</u> court reviewed cases involving the FBI data bases analyzed under the <u>Frye</u> standard. <u>Vargas</u>, 640 So. 2d 1148-50. Relying on those cases and this Court's holding in <u>Flanagan v. State</u>, 625 So. 2d 827 (Fla. 1993), the <u>Vargas</u> court

² Under <u>Frye</u>, in order to introduce expert testimony deduced from a scientific principle or discovery, the principle or discovery "must be sufficiently established to have gained general acceptance in the particular field in which it belongs." <u>Frye</u>, 293 F. at 1014.

held that the <u>Frye</u> test is applicable in Florida to DNA evidence concerning FBI/FDLE data bases and population statistics. Thus, DNA population frequency evidence is inadmissible when it is shown that the methods by which FDLE arrived at population frequencies, using FBI data bases, is not generally accepted in the scientific community. <u>Vargas</u>, 640 So. 2d at 1150-52. The court specifically rejected a less stringent relevance/reliability standard of admissibility. Vargas, 640 So. 2d at 1150.

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In <u>Brim</u>, however, the court said: "We do not believe that the Florida Supreme Court intended, as the <u>Vargas</u> court announced, that <u>Flanagan v. State</u>, 625 So. 2d 827 (Fla. 1993), addressed the precise issue before us." <u>Brim</u>, 20 Fla. L. Weekly at D934. The court then went on to discuss this Court's holding in <u>Ramirez v.</u> <u>State</u>, 651 So. 2d 1164 (Fla. 1995). <u>Ramirez</u> reaffirmed the <u>Frye</u> standard in Florida. It also set forth a four step process for trial judges to use in applying <u>Frye</u>.³ Under its view of <u>Ramirez</u>, the Second District took the position that if an underlying scientific procedure (DNA testing) is generally accepted, then

Ramirez, 651 So. 2d at 1167 (citations omitted.)

³ First, the trial judge must determine whether such testimony will assist the jury in understanding the evidence or determining a fact in issue.

Second, the trial judge must decide whether the expert 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."

The third step in the process is for the trial judge to determine whether a particular witness is qualified as an expert to present opinion testimony on the subject in issue.

Fourth, the judge may then allow the expert to render an opinion on the subject of his or her expertise, and it is then up to the jury to determine the credibility of the expert's opinion which it may either accept or reject.

evidence of statistical analysis (DNA data bases and population frequencies) to show the force of the underlying principle does not have to pass <u>Frye</u> to be admissible. <u>Brim</u>, 20 Fla. L. Weekly at D934. The court noted concern:

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Further language in the <u>Ramirez</u> opinion causes us concern, however. That language is as follows:

In utilizing the <u>Frye</u> test, the burden is on the proponent of the evidence to prove the general acceptance of <u>both</u> 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. The general acceptance under the <u>Frye</u> test must be established by a preponderance of the evidence.

[651 So. 2d at 1168] (emphasis supplied.) We construe this language not to apply to the issue before us for to do so, we conclude, would conflict with the holding in <u>Bundy I</u>, on which we have relied.

Brim, 20 Fla. L. Weekly at D934.⁴ The Second District also relied on <u>Andrews v. State</u>, 533 So. 2d 841 (Fla. 5th DCA 1988), <u>rev.</u> <u>denied</u>, 542 So. 2d 1332 (Fla. 1989), in agreeing that the "'relevancy approach' is the preferred approach when faced with the admissibility of the comparison techniques or deductions based upon

⁴<u>Bundy v. State</u>, 455 So. 2d 330 (Fla. 1984), <u>cert. denied</u>, 476 U.S. 1109, 106 S. Ct. 1958, 90 L. Ed. 2d 366 (1986) (<u>Bundy I</u>), was not cited by the parties. The Second District's reliance on <u>Bundy</u> <u>I</u> is misplaced since the case does not address the sciences of population genetics or statistical frequencies. Mr. Brim's case involves total reliance on DNA evidence and its meaning through statistics.

the generally accepted scientific DNA analysis." <u>Brim</u>, 20 Fla. Law Weekly at D933.⁵

It is Mr. Brim's position that the Frye standard must be applied to the data base and statistical frequency prong of DNA evidence before it is admissible. The facts of his case and case law show the compelling need to continue to assure cautious and responsible use of DNA evidence. In Mr. Brim's case, trial counsel through a motion in limine presented authority and argued that the DNA test results and population frequency statistics were required to meet -- but did not meet -- the Frye standard. The state argued alternatively that the evidence need only meet a relevancy standard or the evidence could satisfy the Frye standard. The trial court ruled that the relevancy standard was the applicable standard based on <u>Robinson v. State</u>, 610 So. 2d 1289 (Fla. 1992), and found:

. . they didn't really apply the <u>Frye</u> standard, and I'm going to make that finding for the record and for the appellate court purposes, that I don't believe that the <u>Frye</u> standard is the applicable standard in this case. (#93-0863 - T890; #93-0860 - T146)

⁵Appellate counsel acknowledged below that Florida's Fifth District Court of Appeal allowed DNA evidence to be admitted under a relevancy/reliability standard in <u>Andrews v. State</u>, 533 So. 2d 841, 847 (Fla. 5th DCA 1988), <u>petition for review denied</u>, 542 So. 2d 1332 (Fla. 1989). <u>Andrews</u> was the first appellate decision in this country to allow DNA evidence in criminal cases. <u>Id</u>. at 843. Unlike the instant case, in <u>Andrews</u> the defense provided no authority that questioned the scientific acceptance of the testing. <u>Id</u>. at 849. Appellate counsel also urged below that <u>Andrews</u>' relaxed admissibility standard is no longer viable under the holding in Flanagan.

[&]quot;In adopting the <u>Frye</u> test, the Florida Supreme Court has implicitly overruled various District Court of Appeal decisions which applied the balancing test." <u>See</u> Charles W. Ehrhardt, <u>Florida Evidence</u> §702.3 and n. 11 (1995 Edition) (citing <u>Andrews</u> as one of the cases implicitly overruled.)

... I'm finding that there is a general acceptance of this procedure within the scientific community for various purposes, and that it is reliable. (#93-0863 -T891; #93-0860 - T147)

I am not inclined to hear anything about the data base and the populations that were used, although I read all of that material. That's something you might argue to the jury, but I'm not going to be rehashing that or anything, eliminating the evidence on this basis. (#93-0863 - T892; #93-0860 - T148)⁶

In the instant case, trial counsel produced scientific literature and judicial authority which raised serious population

In admitting the results of scientific tests and experiments, the reliability of the testing methods is at issue, and the proper predicate to establish that reliability must be laid. <u>Ramirez v. State</u>, 542 So. 2d 352 (Fla. 1989). If the reliability of a test's results is recognized and accepted among scientists, admitting those results is within a trial court's discretion. <u>Stevens v. State</u>, 419 So. 2d 1058 (Fla. 1982), <u>cert</u>. <u>denied</u>, 459 U.S. 1228 (1983). When such reliable evidence is offered, "any inquiry into its reliability for purposes of admissibility is only necessary when the opposing party makes a timely request for such an inquiry <u>supported by authorities indicating that there may not be</u> <u>general scientific acceptance of the technique employed</u>." <u>Correll v. State</u>, 523 So. 2d 562, 567 (Fla.), <u>cert</u>.

<u>Robinson</u>, 610 So. 2d at 1291.

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Because Robinson produced nothing that questioned the general scientific acceptance of the DNA testing, the court held that the facts of the case showed no reversible error or abuse of the trial court's discretion regarding admissibility of the DNA test results. Robinson, 610 So. 2d at 1291.

⁶ Although urged on appeal that the trial court's reliance on <u>Robinson</u> was erroneous, the Second District did not address the argument. In <u>Robinson</u>, the defendant challenged the admission of DNA identification evidence and the denial of a motion for continuance to gain further information about DNA testing. The court disagreed with Robinson's arguments because the defendant knew a surviving victim would identify him at trial and he had been aware of the DNA testing and received the test reports a sufficient time prior to trial. The <u>Robinson</u> court stated:

genetics issues and showed that the FBI and FDLE methods of calculating statistical probabilities was a subject of great disagreement within the scientific community. (#93-0863 - R30-106, 183-184, T746-812; #93-0860 - R28-185, T3-68) The state concurred that a dispute existed within the scientific community concerning the general acceptance of the data bases and population frequency statistics but urged that the evidence was admissible as relevant under any standard. (#93-0863 - T802-803; #93-0860 - T58-59) The expert testimony admitted at Mr. Brim's trial shows that the DNA testing was conducted at the FDLE laboratory in Orlando based on procedures that were used by the FBI. The FDLE laboratory had only done DNA testing for two to three months when it profiled Mr. Brim's DNA. (ET336-337, 417) Based on population data bases, David Baer of the FDLE concluded that Mr. Brim's DNA pattern would be present in one out of 1.4 billion white people and one out of 3.5 million black people. (ET374-380) Baer acknowledged that the FDLE lab was not licensed or accredited to do DNA testing and was not governed by anyone in terms of quality standards. (ET391) He also acknowledged that the National Academy of Science / National Research Council study, "DNA Technology in Forensic Science," concluded that an important need exists for standardization of lab procedures and for proficiency testing and accreditation before DNA profiling should be used in a forensic or courtroom setting. (ET394) Baer recognized he had no expertise in statistics or population genetics, and his background in molecular biology was limited. (ET396-397) He agreed that a great deal of controversy

exists in the scientific and forensic community concerning the determination of population frequencies, and methods used by the FBI and FDLE in compiling its data bases have been criticized as insufficient, including in regard to the black population. (ET397-401) Although the forensic community generally accepted the use of the population frequencies, the scientific community did not. (ET401-411)

A second state witness, Dr. Kevin McElfresh, was recognized as an expert in molecular biology and population genetics. (ET428-433) He reviewed the FDLE's DNA results in Mr. Brim's case. (ET440) He reviewed the autorads visually and compared his findings with the printed results from FDLE. (ET441-443) He found no indication of error and agreed with the matches found by FDLE. (ET445-448) He did not have the FDLE data bases, but based on his general knowledge he did a quick qualitative check of the FDLE results and spot-checked some calculations. His calculations agreed with Dr. Baer's. (ET455-456, 458) The match did not mean Mr. Brim was the perpetrator of the crime, but did mean he could not be eliminated as the perpetrator, and he was identified as the owner of the sample based on population frequencies. (ET501)

Dr. Laurence Mueller, the defense expert on population genetics, testified that the two population data bases used by the FDLE in Mr. Brim's case involved samples of Caucasians in Florida and samples of blacks from a geographic range including Texas, Florida, and California. (ET535) There is growing concern in the scientific community about errors generated by applying the product

rule to very broad groups such as Caucasians or Hispanics; rather, data should be collected from a large number of subgroups of the various populations for comparison. (ET547-549, 557) The National Academy of Sciences also proposed that the "ceiling principle" should be used in forensic cases instead of the product rule. (ET558) Under this principle, each autorad band would be evaluated using fifteen or twenty data bases. Each data base would result in a different number and the largest frequency base value would be applied to each band. (ET559) A single number would then be calculated to determine the probability of finding an individual with the entire genetic ensemble. (ET559-560) The Academy also recommended blind proficiency testing for forensic laboratories so the results could be reported to juries in a quantitative manner. (ET560-562)

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Errors in forensic DNA profiling had been made by various organizations. (ET566-573) Dr. Mueller explained various problems with DNA testing and explained recommendations made by the Academy's National Research Council. He applied the National Academy of Sciences' recommended counting method and ceiling principle to the evidence in Mr. Brim's case. Using the ceiling principle he reached an estimated frequency of one in approximately 9,000 in the black data base. The counting method resulted in a frequency of one in 960 or less. (ET594-601)

There is logic to the Second District's conclusion in <u>Brim</u> that more than one deduction may be admissible in a given case, but it is erroneous to say that evidence pertaining to DNA data bases

and population frequencies need not meet Frye. In DNA, two different sciences are involved. One is molecular biology, or the way in which DNA is tested and matched, and the other is the science of population genetics/statistical frequencies that give meaning to the match. Evidence of population frequencies in DNA cases is science, in and of itself. It is presented to a jury strictly as scientific evidence. Under Flanagan and Ramirez, the evidence must meet Frye. As was explained by this Court in Stokes v. State, 548 So. 2d 188 (Fla. 1989), Frye is the test for admissibility of scientific evidence in Florida. "If the scientific community considers a procedure or process unreliable for its own purposes, then the procedure must be considered less reliable for courtroom use." 548 So. 2d at 193-94. Stokes rejected the application of a balancing test to determine whether a preliminary showing of scientific reliability had been demonstrated. To be admissible scientific evidence "must have 'attained sufficient scientific and psychological accuracy . . . [and] general recognition as being capable of definite and certain interpretation.'" Charles W. Ehrhardt, Florida Evidence §702.3 n. 8 (1995 Edition) (quoting <u>Stokes</u>/<u>Frye</u>). In <u>Flanagan</u>, this Court noted that Florida adheres to the Frye test and not to the new federal relevancy test announced in <u>Daubert v. Merrell Dow Pharmaceuticals</u>, ____ U.S. ___, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993). Flanagan, 625 So. 2d at 829 n. 2.

As to the requirement that the DNA typing population frequency determination must meet the requirements of <u>Frye</u>, <u>People v. Soto</u>,

35 Cal. Rptr. 2d 846 (Cal. App. 4th Dist. 1994) gives instruction. In <u>Soto</u>, as in Mr. Brim's case, the only evidence of the crime was DNA evidence. The <u>Soto</u> court held that the statistical prong of DNA typing must meet <u>Kelly</u> - <u>Frye</u>.⁷ The <u>Soto</u> court specifically disagreed with the state's assertion that the frequency determination is only a statistical probability calculation admissible under a lesser standard. <u>Soto</u>, 35 Cal. Rptr. 2d at 855.⁸ As the court said:

> Although the frequency determination is clearly a probability estimate, it is also an essential element of the DNA RFLP technique. The calculation indicates the significance of the match made by RFLP technique. (See [Minnesota v.] Bloom, . . ., 516 N.W. 2d at p. 164 ["[T]he issue . . . is not the admissibility of DNA evidence but the form that the presentation of the evidence takes."].) It is <u>not</u> a statistical probability of the defendant's guilt. (<u>Id</u>., at p. 171.) Thus, it must meet the prerequisites of <u>Kelly</u>, as part and parcel of the RFLP testimony. (<u>People v. Wallace</u>, . . ., 14 Cal. App 4th at p. 659, 17 Cal. Rptr. 2d 721; [<u>People v.] Barney</u>, . . ., 8 Cal. App. 4th at pp. 817-818, 10 Cal. Rptr. 2d 731; <u>[People v.] Axell</u>, . . .235 Cal. App. 3d at pp. 866-867, 1 Cal. Rptr. 2d 411; see <u>[People v.] Pizzaro</u>, . . ., 10 Cal. App. 4th at p. 95, 12 Cal. Rptr. 2d 436.)

Soto. 35 Ca. Rptr. 2d at 855.

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The more recent decision in <u>People v. Leahy</u>, 882 P. 2d 321 (Cal. 1994), is also pertinent. There, the court concluded the lower appellate court was correct in reversing the defendant's

⁷ <u>People v. Kelly</u>, 17 Cal. 3d 24, 130 Cal. Rptr. 144, 549 P. 2d 1240 (1976) is the case where California adopted <u>Frye</u>. <u>Soto</u>, 35 Cal. Rptr. 2d at 847 n. 2.

⁸ <u>Soto</u> is cited by the Second District in <u>Brim</u>, 20 Fla. L. Weekly at D933.

convictions because no evidence was elicited to show under <u>Kelly</u> -<u>Frye</u> that a horizontal gaze nystagmus (HGN) field sobriety test was admissible. The case was remanded for a <u>Kelly</u> hearing. <u>Leahy</u>, 882 P. 2d at 335. The court refused to follow the suggestion of the state that it take judicial notice of various decisions and published studies concluding that HGN meets the <u>Frye</u> standard. "[T]he conclusion of those decisions and studies are by no means unchallenged, for there appears to exist substantial opposing authority." <u>Leahy</u>, 882 P. 2d at 334-35. (citations omitted.)

Civil cases involving statistical and other data used to show causation have bearing on the issue. In a recent Florida circuit court case involving the fields of toxicology, neuropsychology, pharmacology and epidemiology, the court granted a defense motion to exclude the expert testimony about exposure to organic solvents. Berry v. CSX Transportation, Inc., 3 Fla. L. Weekly Supp. 153 (Fla. 4th Cir. Ct. April 28, 1995). In Daubert v. Merrell Dow Pharmaceuticals, Inc., 43 F.3d 1311, 1320-21 (9th Cir. 1995), considered after remand from the U.S. Supreme Court, epidemiological data was at issue. The plaintiffs wanted to use experts who had taken samples of the population and compared the samples to frequency of birth defects in children whose mothers took the drug Bendectin. The ratio derived from the statistical comparison would purportedly be an estimate of the "relative risk" associated with the drug and would go to the issue of causation. The <u>Daubert</u> court held under the new federal relevancy standard that the statistical data was The court said: "[T]he Supreme Court noted that inadmissible.

scientific expert testimony carries special dangers to the factfinding process because it "'can be both powerful and quite misleading because of the difficulty in evaluating it.'" . . . "Federal judges must therefore exclude proffered scientific evidence under Rules 702 and 403 unless they are convinced that it speaks clearly and directly to an issue in dispute in the case, and that it will not mislead the jury." <u>Daubert</u>, 43 F.2d at 1321, n. 17. (citation omitted.) <u>Daubert</u> is also instructive on the issue of the complexity and difficulty of applying the relevancy test. 43 F. 2d at 1315-20.

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The need to apply the <u>Frye</u> standard to the data base and statistical calculation steps of DNA analysis was emphasized in <u>People v. Barney</u>, 10 Cal. Rptr. 2d 731, 741-42 (Cal. App. 1 Dist. 1992). There the court noted:

. . . The statistical calculation step is the pivotal element of DNA analysis, for the evidence means nothing without a determination of the statistical significance of a match of DNA patterns. . . To say that the frequency of [the defendant's] DNA pattern is 1 in 200 million in the Black population is tantamount to saying his pattern is totally unique, and thus <u>only</u> he could have been the source of the crime scene bloodstains that did not match those of the victim.

. . [To] leave it to jurors to assess the current scientific debate on statistical calculation as a matter of weight rather than admissibility . . . would be asking jurors to do what judges carefully avoid -- decide the substantive merits of competing scientific opinion as to the reliability of a novel method of scientific proof. . . The result would be predictable. The jury would simply look to the bottom line . . This is an instance in which the method of scientific proof is so impenetrable that it would '. . assume a posture of mystic infallibility in the eyes of a jury. . . ' Barney, 10 Cal. Rptr. 2d at 742 (citations omitted).9

In Mr. Brim's case, the trial court applied the wrong legal standard and ruled the DNA evidence admissible under a relevancy standard. (T890-892) The state and its expert agreed that great debate and controversy existed in the scientific community about the data bases and population frequencies as used by the FBI and The erroneous admission of the DNA population statistic FDLE. evidence cannot be deemed harmless error in Mr. Brim's case. The harmless error test in Florida places the burden on the state, as the beneficiary of the error, to prove beyond a reasonable doubt that the error complained of did not contribute to the verdict. Application of the harmless error test requires an appellate court to closely examine the permissible evidence on which the jury could have legitimately relied, and in addition an even closer examination of the impermissible evidence which might possibly have influenced the jury verdict. State v. Diquilio, 491 So. 2d 1129, 1135 (Fla. 1986). In the instant case, there was no evidence other than the DNA evidence which linked Mr. Brim to the crime.

A new trial is required, and the Court should determine if, upon remand, the state will have an opportunity to seek admissibility of population frequency statistical evidence if it can show

⁹ See also, for example, <u>Vargas; State v. Anderson</u>, 853 P. 2d 135, 144-47 (N.M. App. 1993)(cases considering the FBI population frequency statistics have generally refused to admit the DNA evidence due to data bases and binning methods not being generally accepted among respected scientists; court also rejected the assertion that the accuracy of DNA probability calculations goes to the weight of the evidence rather than its admissibility); <u>State v.</u> <u>Vandebogart</u>, 616 A. 2d 483, 484 (N.H. 1992).

that revised data bases and statistical analyses are generally accepted in the scientific community. The <u>Frye</u> standard should be specifically adopted for both prongs of DNA evidence -- the testing procedures and the application of population frequency statistics to any match.

As Professor Charles W. Ehrhardt has explained:

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When there is an issue as to whether a scientific test or theory meets the Frye standard, the supreme court in Ramirez v. State, emphasized that 'the 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.' Before the evidence may be admitted, the trial judge has the 'sole responsibility' to determine whether the proponent has established the Frye foundation by a preponderance of the evidence. In Ramirez, the trial court committed reversible error by holding a pre-trial hearing in which it restricted the Frye testimony and evidence to that offered by the prosecution to support the admission of knifemark comparison evidence and rejected defense evidence on the issue on the basis that it only went to the weight the jury should give the evidence.

Charles W. Ehrhardt, Florida Evidence §702.3 (1995 Edition).

Based on the facts and authorities presented, <u>Frye</u> is the proper standard in Florida to apply to both prongs of DNA scientific evidence. The failure to follow <u>Frye</u> requires reversal of Mr. Brim's convictions.

CONCLUSION

In light of the foregoing reasons, arguments, and authorities, the decision of the Second District Court of Appeal should be reversed.

APPENDIX

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1. <u>Brim v. State</u>, 20 Fla. L. Weekly D932 (Fla. 2d DCA April 12, 1995) A1-4 (ii) the difference between the value that the product contracted for would have had and the value of the performance that has been received by the plaintiff, if construction and completion in accordance with the contract would involve unreasonable economic waste.

Cabada was offered the option of rescission, but opted for the more attractive remedy of keeping the residence together with what amounts to a full refund of the purchase price.¹ Such a remedy is not supported by any authority which has come to our attention, applying either the measure of damages available in fraud or breach of contract. This record is devoid of any evidence upon which the trial court could have arrived at the amount of \$126,000. We, therefore, reverse the final judgment on the issue of damages. We remand for new trial on the issue of damages consistent with this opinion. See Smith v. Mark Coleman Constr., Inc., 594 So. 2d 812 (Fla. 2d DCA 1992).

Affirmed in part, reversed in part, and remanded. (DANA-HY, A.C.J., and FULMER, J., Concur.)

¹An appraisal in evidence, made one month before closing, reflects a land value of \$32,000 and a value of the structure itself in the amount of \$89,212.

Criminal law—Probation—Conditions—Conditions prohibiting defendant from possessing, owning or carrying weapons or destructive devices; using intoxicants to excess; consuming or possessing alcohol; associating with people who use alcohol or illegal drugs; and frequenting places where alcohol is main source of business must be orally pronounced—Condition prohibiting possession of firearm is valid general condition which need not be orally pronounced—Condition requiring evaluation and treatment at defendant's expense for drug or alcohol problem must be orally pronounced

DOLPHIS A. HAMILTON, Appellant, v. STATE OF FLORIDA, Appellee. 2nd District. Case No. 93-04379. Opinion filed April 12, 1995. Appeal from the Circuit Court for Polk County; Olin W. Shinholser and Dennis P. Maloney, Judges, respectively. Counsel: James Marion Moorman, Public Defender, Bartow, and Kevin Briggs, Assistant Public Defender, Bartow, for Appellant. Robert A. Butterworth, Attorney General, Tallahassee, and Robert J. Krauss, Assistant Attorney General, Tampa, for Appellee.

(THREADGILL, Acting Chief Judge.) The appellant's counsel has filed a brief in this appeal pursuant to Anders v. California, 386 U.S. 738, 87 S. Ct. 1396, 18 L. Ed. 2d 493 (1967). In accordance with Anders, we have reviewed the record and affirm the appellant's conviction and sentence for trafficking in cocaine.

We find, however, that certain written conditions of the appellant's probation were not orally pronounced and therefore he was deprived of an opportunity to object to any condition which he may have believed inappropriate. *Olvey v. State*, 609 So. 2d 640 (Fla. 2d DCA 1992).

Condition three prohibits the appellant from possessing, owning or carrying weapons, firearms or destructive devices. The appellant, a convicted felon, is already legally prohibited from possessing, owning or carrying firearms, therefore, that portion is a valid general condition and did not need to be orally pronounced. *Fitts v. State*, 649 So. 2d 300 (Fla. 2d DCA 1995). We strike the remaining portion of condition three relating to weapons or destructive devices because it was not pronounced at sentencing.

The portion of condition five that prohibits the use of intoxicants to excess is a special condition and should have been orally pronounced. *Tomlinson v. State*, 645 So. 2d 1 (Fla. 2d DCA 1994). Therefore, we strike that portion of condition five.

Condition eighteen prohibits consumption and possession, associating with people who use alcohol or illegal drugs and frequenting places where alcohol is the main source of business or where illegal drugs are used. The trial court orally prohibited the appellant from possessing or using any controlled substances, however there was no pronouncement of the portions of condition eighteen relating to alcohol. Those portions are special conditions which must be orally pronounced. *Farrington v. State*, 20 Fla. L. Weekly D564 (Fla. 2d DCA Mar. 3, 1995). Since they were not pronounced, we strike them.

Condition twenty requires evaluation and treatment at the appellant's expense for a drug or alcohol problem. This is a special condition which was not orally pronounced, and is stricken. Nank v. State, 646 So. 2d 762 (Fla. 2d DCA 1994). At sentencing, the trial court stated only that the appellant was subject to random urinalysis, which is a valid condition.

Accordingly, we affirm appellant's judgment and sentence. We remand to the trial court to modify the written order of probation in accordance with this opinion.

Affirmed; remanded. (PARKER and WHATLEY, JJ., Concur.)

Criminal law—Evidence—Scientific—DNA test results—The existence of two differing views concerning proper population frequency statistics to be applied does not render DNA analysis itself inadmissible nor does it render differing views inadmissible, so long as each view or approach is shown to be generally accepted by a typical cross-section of the relevant scientific community—Conflict certified—Search and seizure—Blood and saliva samples—Where detective had possession of blood and saliva samples pursuant to an earlier investigation, any privacy interest defendant might have had had dissipated, and no warrant was required to submit the sample for a different investigation—Sentencing—Error to impose habitual offender sentences to be served consecutively—Habitual offender designation to be eliminated from misdemeanor sentence

ROBERT JAMES BRIM, Appellant, v. STATE OF FLORIDA, Appellee. 2nd District. Case Nos. 93-00860, 93-00863, 93-00864. Opinion filed April 12, 1995. Appeal from the Circuit Court for Hillsborough County; Debra K. Behnke, Judge. Counsel: James Marion Moorman, Public Defender, and Jennifer Y. Fogle, Assistant Public Defender, Bartow, for Appellant. Robert A. Butterworth, Attorney General, Tallahassee, and Dale E. Tarpley, Assistant Attorney General, Tampa, for Appellee.

[Original Opinion at 20 Fla. L. Weekly D628a] BY ORDER OF THE COURT:

Upon consideration of appellee's motion for rehearing, the original opinion issued on March 8, 1995, is hereby withdrawn and the attached opinion is substituted therefor. Otherwise, the motion for rehearing is denied.

(CAMPBELL, Judge.) The primary issue presented for our consideration in this appeal is whether, in considering a request for admission of the statistical consequences of the analysis of matching DNA samples, a court must exclude all or part of that analysis if the court is presented with evidence of two differing but generally accepted views within the scientific community concerning the proper population frequency statistics to be applied. These population frequency statistics are critical because the statistics, when applied to the DNA test results, are the genesis of the extremely persuasive probability estimates (one in a million, for example) that are commonly associated with DNA testing. Our extensive review of the emerging law in this area leads us to conclude that the existence of two differing views on a statistical frequency approach neither renders the DNA analysis itself inadmissible, nor renders those differing views inadmissible so long as each view or approach is shown to be generally accepted by a typical cross-section of the relevant scientific community. That having been the case here, we affirm.

Appellant Brim challenges his convictions and sentences for various offenses arising out of three separate occasions in which he broke into women's homes. In two of the three cases, appellant was convicted of sexually battering the women whose homes he entered (Case Nos. 93-00860 and 93-00863). In one of those two cases, he was also charged with armed burglary of a dwelling and robbery (Case No. 93-00860). In the other of those two cases, he was also charged with burglary of a dwelling with assault or battery and with robbery (Case No. 93-00863). In 93-00860, appellant pled nolo, reserving the right to appeal the denial of his motion in limine and motion to suppress. In the third case, appellant pled no contest to misdemeanor battery and to burglary of a dwelling with an assault. Appellant's sentencing issues will be considered later in this opinion.

The evidence against appellant in the first two cases consisted primarily of DNA analysis and blood and saliva samples. He challenges the admission of both. It is appellant's position that the DNA population frequency statistics did not meet the test for admission of novel scientific evidence established in *Frye v*. *United States*, 293 F. 1013 (D.C. Cir. 1923), which requires that novel scientific evidence be generally accepted in the relevant scientific community in order to be admissible. As the *Frye* court stated, "the evidential force of the principle must be recognized." Appellant maintains that because there is currently a debate concerning the proper statistical population base to use in any given case, the statistical frequency figures are not "generally accepted" in the relevant scientific community and, accordingly, were not properly admitted.

In analyzing this problem, a rudimentary understanding of the DNA testing process is necessary. DNA testing first begins with the actual chemical process which separates out polymorphisms (genetic areas of difference among individuals) and readies them for analysis. The second step is that in which the sample DNA molecule is compared or matched to the defendant's DNA sample.

It is the third segment of the process, or the application of a statistical population frequency analysis, that is at issue here. This is where the statistical significance of the match is determined. For example, the probability of the match occurring randomly might be determined to be one in a million or one in 300 million. Since it is the application of the population frequency statistics that makes the DNA test results so persuasive, admission of these statistics must be carefully scrutinized to avoid undue prejudice to the defendant. It is in this area that the applicability of the *Frye* test has become most confused.

In arriving at the statistical significance of the match, the field of human population genetics is consulted. The statistical significance is measured by the frequency with which a particular DNA pattern would be observed in a sample population. The DNA testing here was performed by the Florida Department of Law Enforcement, based on Federal Bureau of Investigation (FBI) procedures. The FBI has sample populations for Caucasians, Blacks, Asians and Hispanics. There is currently a dispute in applying these probabilities to the DNA test results because it is thought that certain population groups may not intermarry with the same frequency as other population groups, or may intermarry with differing frequencies in different locales, thus producing skewed results. This concern led the National Research Council's Committee on DNA Technology to recommend that the "modified ceiling principle" be used in forensic cases. The modified ceiling principle is thought to produce more conservative results than the FBI procedure. In the instant case, the FBI procedure generated a probability that only one out of 1.4 billion whites and one out of 2.5 million blacks would share the DNA code with the perpetrator of the offense. The modified ceiling principle indicated that only one in just over 9,000 individuals would share the perpetrator's genetic DNA code.

The state argues that the DNA probability statistics are generally accepted despite the existence of the dispute because the theories presented are *both* generally accepted, were both presented to the jury, and the jury was allowed to assess their weight.

We begin our analysis with the observation that the rule in Frye was established as a reliability test, on the theory that once a scientific supposition is generally accepted among the relevant scientists, it is more likely to be reliable. The Frye court

emphasized that it is the scientific principle or discovery from which deductions are made that must be generally accepted. The existence of one reliable theory or deduction from underlying reliable scientific evidence does not necessarily exclude the existence of another reliable deduction or theory. The *Frye* court, in its brief opinion, stated:

Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony *deduced* from a well-recognized scientific principle or discovery, the thing from which the *deduction is made must be sufficiently established to have gained* general acceptance in the particular field in which it belongs.

293 F. at 1014 (emphasis supplied). Given the very nature of scientific and technological advances, it is quite possible that there will be, at any one time, more than one deduction that can be made from a generally accepted theory.

Inherent in the scientific method is "testing and confirmation of [] hypotheses . . . " a never-ending process. As Albert Einstein said, "One reason why mathematics enjoys special esteem, above all other sciences, is that its laws are absolutely certain and indisputable, while those of all other sciences are to some extent debatable" (citations omitted). If the Kelly requirements [the California version of Frye] were met only if there were no debate on a subject, even Copernicus's theory of a sun-centered solar system could not be mentioned in a court of law. The flat earth society would carry the day. Indeed, no scientific advance has yet been developed that cannot be questioned or debated. For this reason, evidentiary rules do not require absolute certainty or unanimity.

People v. Soto, 30 Cal. App. 4th 340, 357, 35 Cal. Rptr. 2d 846, 856 (Cal. App. 4th Dist. 1994), *modified on rehearing*, 1994 WL 714008 (Cal. App. 4th Dist. Dec. 22, 1994) (citations omitted).

Accordingly, we do not read Frye as limiting the admissible deductions that can be made from reliable scientific evidence to a single "generally accepted" deduction or theory. There is nothing in Frye to suggest that. In fact the opposite is true as reflected in the Frye quote above. In this regard, we are influenced by Judge Orfinger's analysis in Andrews v. State, 533 So. 2d 841 (Fla. 5th DCA 1988), rev. denied, 542 So. 2d 1332 (Fla. 1989). Although the issue in Andrews was not the precise issue before this court, we agree with Judge Orfinger that the "relevancy approach" is the preferred approach when faced with the admissibility of the comparison techniques or deductions based upon the generally accepted scientific DNA analysis. The issue presented to us (as it is in most cases where admissibility of DNA evidence is contested) is exactly the same as our supreme court considered in Bundy v. State, 455 So. 2d 330 (Fla. 1984), cert. denied, 476 U.S. 1109, 106 S. Ct. 1958, 90 L. Ed. 2d 366 (1986) [Bundy I], in considering the admissibility of testimony of dental experts who compared "bite marks" on a victim with models of the defendant Bundy's teeth. There, the supreme court stated:

Bundy also challenges the trial court's ruling that permitted the state to present the testimony of dental experts who analyzed the bite inflicted on murder victim Lisa Levy and compared it to the models of appellant's teeth. Before trial the defense moved to exclude such evidence on the ground that the comparison techniques were not reliable. Dental experts for the state and the defense testified at the motion hearing....

The trial court found that the science of odontology, which is based on the discovery that the characteristics of individual human dentition are highly unique, is generally recognized by scientists in the relevant fields and therefore is an acceptable foundation for the admissibility of expert opinions into evidence. The court in effect ruled that since the proffered evidence met this criterion the details of the comparison techniques were matters of credibility and weight of the evidence for the jury to determine

Appellant contends that the bite mark comparison evidence

and expert testimony should not have been admitted into evidence because it was not shown that the comparison techniques were reliable and that accepted standards of comparison were used....

The evidence in question is based on the examination of impressions made by human teeth and their comparison with models of known human teeth for the purpose of determining whether the impressions were or probably were or could have been made by a particular individual. Bite mark comparison evidence differs from many other kinds of scientific evidence such as blood tests, "breathalyzer" tests, and radar (as well as from inadmissible techniques such as the polygraph and voice-print analyses) in that these various techniques involve total reliance on scientific interpretation to establish a question of fact. With bite marks evidence, on the other hand, the jury is able to see the comparison for itself by looking directly at the physical evidence in the form of photographs and models. People v. Slone, 76 Cal.App.3d 611, 143 Cal.Rptr. 61 (Cal.Ct.App.1978); People v. Marx, 54 Cal.App.3d 100, 126 Cal.Rptr. 350 (Cal.Ct.App. 1975).

As the trial court found, the basis for the comparison testimony-that the science of odontology makes such comparison possible due to the significant uniqueness of individual dental characteristics-has been adequately established. Appellant does not contest this supposition. Forensic odontological identification techniques are merely an application of this established science to a particular problem. People v. Marx. The technique is similar to hair comparison evidence, which is admissible even though it does not result in identifications of absolute certainty as fingerprints do. Jent v. State, 408 So.2d 1024 (Fla. 1981), cert. denied, 457 U.S. 1111, 102 S.Ct. 2916, 73 L.Ed.2d 1322 (1982); Peek v. State, 395 So.2d 492 (Fla. 1980), cert. denied, 451 U.S. 964, 101 S.Ct. 2036, 68 L.Ed.2d 342 (1981). Its probative value to the case is for the trier of fact to determine.

The trial court also found that the comparison techniques actually used in this case were reliable enough to allow the experts to present their materials and their conclusions to the jury. Bundy has presented no basis for finding that the trial judge abused his discretion in doing so.

455 So. 2d at 348-349 (emphasis supplied).

Accordingly, we hold that the trial court was correct in finding that the evidence presented here satisfies the *Frye* test. Where there are two differing, but both generally accepted deductions that can be made from generally accepted scientific evidence, they may both be admitted provided that the underlying scientific evidence satisfies *Frye*. The existence of such differing views or deductions does not require the exclusion of DNA evidence entirely. To do so would be to throw the proverbial "baby out with the bath water."

While we find that the evidence here meets the *Frye* test, we express our concern with the application of the *Frye* test in some cases. It may be that a general relevancy test, one that does not limit the admissible scientific evidence to that reflected by one unanimous view, would be a more preferable, and perhaps realistic, test in such situations.

We recognize that our conclusion that DNA population statistics need not meet the stringent *Frye* test conflicts with that of our sister court in *Vargas v. State*, 640 So. 2d 1139 (Fla. 1st DCA 1994). We are not persuaded by that decision. We, accordingly, certify conflict. We do not believe that the Florida Supreme Court intended, as the *Vargas* court announced, that *Flanagan v. State*, 625 So. 2d 827 (Fla. 1993), addressed the precise issue before us.

We have an additional concern regarding application of the *Frye* test due to recent statements of our supreme court in *Romirez v. State*, 20 Fla. Law Weekly S19 (Fla. Jan. 5, 1995) [No. 78,386]. There, the supreme court provided an excellent analysis of the procedure for admitting into evidence expert testimony based on new or novel scientific evidence. The court outlined the procedure as follows:

The admission into evidence of expert opinion testimony concerning a new or novel scientific principle is a four-step process. See generally Charles W. Ehrhardt, Florida Evidence § 702.1 (1992 Edition); Michael H. Graham, Handbook of Florida Evidence § 90.702 (1987 Edition). First, the trial judge must determine whether such expert testimony will assist the jury in understanding the evidence or in determining a fact in issue. § 90.702, Fla. Stat. (1993) (adopted by the Florida Supreme Court in In re Florida Evidence Code, 372 So. 2d 1369 (Fla. 1979)). Second, the trial judge must decide whether 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." Frye v. United States, 293 F. 1013, 1014 (D.C. Cir. 1923). This standard, commonly referred to as the "Frye test," was expressly adopted by this Court in Bundy v. State, 471 So. 2d 9, 18 (Fla. 1985), cert. denied, 479 U.S. 894, 107 S. Ct. 295, 93 L. Ed. 2d 269 (1986), and Stokes v. State, 548 So. 2d 188, 195 (Fla. 1989). The third step in the process is for the trial judge to determine whether a particular witness is qualified as an expert to present opinion testimony on the subject in issue. § 90.702, Fla. Stat. (1993). All three of these initial steps are decisions to be made by the trial judge alone. See Johnson v. State, 393 So. 2d 1069, 1072 (Fla. 1980), cert. denied, 454 U.S. 882, 102 S. Ct. 364, 70 L. Ed. 2d 191 (1981); Rose v. State, 506 So. 2d 467 (Fla. 1st DCA), review denied, 513 So. 2d 1063 (Fla. 1987). Fourth, the judge may then allow the expert to render an opinion on the subject of his or her expertise, and it is then up to the jury to determine the credibility of the expert's opinion, which it may either accept or reject. Wuornos v. State, 19 Fla. L. Weekly S455, S459 (Fla. Sept. 22, 1994) ("[T]he finder of fact is not necessarily required to accept [expert] testimony."); Walls v. State, 641 So. 2d 381, 390 (Fla. 1994) ("[E]xpert opinion testimony [is] not necessarily binding even if uncontroverted.").

The second step, concerning whether to allow expert opinion testimony on a new or novel subject, is especially important to the process. As Professor Ehrhardt has explained:

When a novel type of opinion is offered, the proffering party must demonstrate the requirements of scientific acceptance and reliability. The most widely adopted test has been that of *Frye v. United States* which involved the admissibility of an early polygraph. The court held the evidence inadmissible because the underlying scientific principle was not "sufficiently established to have gained general acceptance in the particular field in which it belongs."

Ehrhardt, *supra*, § 702.2 (footnotes omitted). The principal inquiry under the *Frye* test is whether the scientific theory or discovery from which an expert derives an opinion is reliable.

20 Fla. Law Weekly at \$19.

We conclude that the issue before us, the admissibility of expert testimony using comparison statistics to provide evidence regarding the relevant force of a generally accepted scientific procedure, is encompassed in steps three and four of the analysis in *Ramirez* and does not require application of the *Frye* test to those steps. Further language in the *Ramirez* opinion causes us concern, however. That language is as follows:

In utilizing the *Frye* test, the 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. The general acceptance under the *Frye* test must be established by a preponderance of the evidence.

20 Fla. Law Weekly at S20 (emphasis supplied.) We construe this language not to apply to the issue before us for to do so, we conclude, would conflict with the holding in *Bundy I*, on which we have relied.

We now turn to appellant's challenge to the admission of blood and saliva samples, arguing that the detective did not have probable cause to request same. However, the detective had possession of the blood and saliva samples pursuant to an earlier investigation. Under State v. Mejia, 579 So. 2d 766 (Fla. 3d DCA 1991), any privacy interest appellant might have had in his blood sample had dissipated, and no warrant was required to submit the sample for a different investigation.

Appellant has also challenged his sentences. We find error only in regard to the habitual offender sentence imposed in regard to Count III (Case No. 93-00860), a life felony. That sentence must be corrected. See Burdick v. State, 594 So. 2d 267 (Fla. 1992); Johnson v. State, 568 So. 2d 519, 520 (Fla. 1st DCA 1990). The court also improperly ordered the habitual offender sentences in 93-00863 to be served consecutively, which is improper under Hale v. State, 630 So. 2d 54 (Fla. 1993). Accordingly, we direct the trial court on remand to correct the sentences as specified herein and vacate the consecutive sentencing and replace it with concurrent sentencing.

Finally, we reach appellant's last issue, his challenge as to his sentencing in 93-00864, an *Anders* appeal. As observed by counsel, the court orally declared appellant a habitual offender on all cases, including his misdemeanor conviction. We remand for correction of the sentencing order in that case to eliminate the habitual felony offender designation from the misdemeanor sentence.

Appellant's convictions are affirmed and the cases remanded for correction of his sentences in accordance herewith. (FRANK, C.J., and FULMER, J., Concur.)

Criminal law—Sentencing—Amendment to criminal statute does not affect prosecution of, or punishment for, a crime committed before the amendment—Error to fail to impose three-year minimum sentence for selling cocaine within 1000 fect of school— Appellate court declines to consider argument presented in motion for rehearing but not presented at trial or in appeal prior to motion—Sentences reversed with opportunity for defendant to withdraw plea on remand

STATE OF FLORIDA, Appellant, v. CHRISTOPHER C. BATTLE, Appellee. 2nd District. Case No. 94-00915. Opinion filed April 11, 1995. Appeal from the Circuit Court for Lee County; William J. Nelson, Judge. Counsel: Robert A. Butterworth, Attorney General, Tallahassee, and Patricia E. Davenport, Assistant Attorney General, Tampa, for Appellant. James Marion Moorman, Public Defender, and John S. Lynch, Assistant Public Defender, Bartow, for Appellee.

[Original Opinion at 19 Fla. L. Weekly D2548b] BY ORDER OF THE COURT:

In response to the appellee's motion for rehearing, the original opinion issued herein on November 30, 1994, is hereby withdrawn and the attached opinion is substituted therefor. Otherwise, the motion for rehearing and rehearing en banc is denied.

[Editor's note: Substituted opinion contains alterations starting in the fourth paragraph.]

(ALTENBERND, Judge.) The state appeals the sentences imposed on Christopher C. Battle, arguing that the trial court was required to impose a three-year minimum sentence because Mr. Battle was convicted of selling cocaine within 1000 feet of a school. We reverse the sentences, but provide Mr. Battle with the opportunity to withdraw his plea on remand.

For events occurring on November 4, 1993, the state filed an information charging Mr. Battle with one count of possession of cocaine and two counts of selling or delivering cocaine within 1000 feet of a school. Mr. Battle pleaded nolo contendere in exchange for concurrent sentences of five years' imprisonment on the possession of cocaine charge and seven years' imprisonment on the two counts of selling or delivering.

At the sentencing hearing in March 1994, the state requested two concurrent three-year minimum sentences on the selling or delivering counts. The trial court believed that the legislature had eliminated such minimum sentences in January 1994 and that it was obligated to impose the newer, more lenient, sentencing.

It is well established that an amendment to a criminal statute

does not affect the prosecution of, or the punishment for, a crime committed before the amendment. Castle v. State, 305 So. 2d 794 (Fla. 4th DCA 1974), affirmed, 330 So. 2d 10 (Fla. 1976). The controlling statute for punishment is the statute in effect at the time of the commission of the crime. Gilford v. State, 487 So. 2d 53 (Fla. 2d DCA 1986). Thus, the trial court was required to sentence based on section 893.13(1)(e), Florida Statutes (1993) (see note following statute; section 22, ch. 93-406, Laws of Florida).¹ Because Mr. Battle was selling cocaine, rather than purchasing it, the holding in State v. Randall, 627 So. 2d 571 (Fla. 2d DCA 1993), would appear to require the imposition of a minimum sentence. In a lengthy motion for rehearing, Mr. Battle has attempted to distinguish Randall based on a 1993 amendment to chapter 397, Florida Statutes. Because this argument was never made to the trial court or to this court prior to the motion for rehearing, we decline to address it at this time. Mr. Battle is free to make this argument at the time of his sentencing on remand.

It is apparent from the record that Mr. Battle may have entered his plea on the assumption that he would not receive a minimum sentence. If that is the case, on remand he may have the option of withdrawing his plea.

Reversed and remanded. (CAMPBELL, A.C.J., and QUINCE, J., Concur.)

¹We note that the trial court did not realize the limited nature of the statutory amendment. Although the legislature eliminated the minimum sentence for *purchase* near a school, it did not eliminate this sentence for *sale or delivery* during most hours of the day within 1000 feet of a school. *See* § 893.13(1)(c), Fla. Stat. (1993).

* * *

Administrative law—Education Practices Commission—Sanctions against teaching certificate for failure to protect students from conditions harmful to learning and for exposing students to unnecessary embarrassment or disparagement—EPC abused its discretion in adopting hearing officer's findings of fact which exonerated teacher, but imposing sanctions after purportedly rejecting hearing officer's conclusions of law—Hearing officer found that there was not only no actual harm to students but also that there was no potential for harm, and question whether a particular action constituted violation of ethical rules is a factual question which may not be rejected without adequate explanation—Record did not support conclusion that teacher intentionally exposed students to unnecessary embarrassment or disparagement—Teacher's request for attorney's fees denied where agency action was product of misunderstanding

DAVID B. LANGSTON, Appellant, v. DOUG JAMERSON, as Commissioner of Education, Appellee. 1st District. Case No. 94-1184. Opinion filed April 13, 1995. An appeal from an order of the Education Practices Commission. Counsel: David Brooks Kundin, Tallahassee, for Appellant. J. David Holder, Tallahassee, for Appellee.

(DAVIS, J.) David Langston appeals an order of the Education Practices Commission (EPC) issuing a letter of reprimand and placing him on three years probation (with conditions regarding notice and supervision) as sanctions against his teaching certificate. The EPC concluded Mr. Langston had breached his profession's Code of Ethics. Specifically, the EPC concluded that Mr. Langston had violated Rule 6B-1.006(3)(a) (failing "to protect the students from conditions harmful to learning") and Rule 6B-1.006(3)(e) (intentionally exposing students to unnecessary embarrassment or disparagement). A two day evidentiary hearing was held before a Hearing Officer from the Division of Administrative Hearings, resulting in a recommended order with extensive findings of fact concluding that Mr. Langston committed no violations and recommending that all charges against him be dismissed. The EPC adopted all of the findings of fact exonerating Mr. Langston contained in the recommended order of the hearing officer, but imposed sanctions on Mr. Langston after purportedly rejecting the hearing officer's conclusions of law. We conclude that the agency abused its discretion and reverse.

CERTIFICATE OF SERVICE

I certify that a copy has been mailed to Dale E. Tarpley, Suite 700 2002 N. Lois Ave., Tampa, FL 33607, (813) 873-4730, on this 100 day of June, 1995.

Respectfully submitted,

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