

IN THE DISTRICT COURT OF  
APPEAL,

FIRST DISTRICT, STATE OF FLORIDA

R. T. BEVIL,

Appellant,

v.

STATE OF FLORIDA,

Appellee.  
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NOT FINAL UNTIL TIME EXPIRES TO  
FILE MOTION FOR REHEARING AND  
DISPOSITION THEREOF IF FILED.

CASE NO. 1D02-1495

Opinion filed June 10, 2004.

An appeal from the circuit court for Hamilton County.  
John W. Peach, Judge.

Nancy A. Daniels, Public Defender; Paula S. Saunders, Assistant Public Defender,  
Tallahassee, for Appellant.

Charlie Crist, Attorney General; Giselle Lylen Rivera, Assistant Attorney General,  
Tallahassee, for Appellee.

WEBSTER, J.

In this direct criminal appeal, appellant seeks review of his convictions, following a jury trial, for sexual battery and trespass in a structure. Because the trial court permitted a Florida Department of Law Enforcement (FDLE) crime lab analyst to testify about DNA population frequencies over appellant's objection that the state

had failed to demonstrate that the FDLE database used to compute the population frequencies satisfied the Frye test, we are constrained to reverse, and to remand for a new trial.

On February 2, 2001, appellant was charged with burglary of a dwelling with a battery and sexual battery. Prior to trial, appellant filed a motion seeking to suppress DNA evidence, and requesting a Frye hearing. See Frye v. United States, 293 F. 1013 (D.C. Cir. 1923). He contended, among other things, that the FDLE database used to compute population frequencies (upon which the state's expert witness intended to rely at trial) had recently been found to be "flawed," and was not being used by FDLE until the "problem" had been "corrected." As a result, according to appellant, the FDLE database could not satisfy the requirements of Frye and Ramirez v. State, 651 So. 2d 1164 (Fla. 1995), and any expert testimony based on that database must be prohibited.

On January 7, 2002, the trial court held a Frye hearing in response to appellant's motion. At the start of that hearing, the prosecutor represented that, at trial, the state's expert would rely exclusively on the FDLE population database for purposes of computing and testifying about DNA population frequencies. During the hearing, Suzanne Livingston, the forensic service director of FDLE, and Jo Ellen Brown, the crime lab analyst who performed the DNA testing on the specimens collected in the

investigation of this case, testified. Regarding the FDLE database, Brown testified that the FDLE population database had been “validated” by an independent consultant in 1999, and FDLE had begun using it to compute population frequencies in 2000. However, both Livingston and Brown testified that the independent consultant had subsequently discovered errors in the database. According to Livingston, because of concerns regarding the accuracy of the FDLE database, she had directed that the entire database be reexamined for errors and that, pending the completion of that reexamination, the FBI database be used instead. As of the date of the hearing, the reexamination had not yet been completed. The state offered no scientific literature addressing the acceptance of the FDLE database, and Livingston testified that she was not aware of any.

Brown testified that, in February 2001, she performed an analysis on the specimens collected in the investigation of this case. According to her, the analysis reflected that there was a mixture of DNA from two or more individuals on the sperm fraction of the vaginal swabs. The DNA in the mixture was consistent with the DNA profiles of the victim and appellant. Using the FDLE database, she concluded that the frequency of appellant’s DNA profile was one in 289 trillion for the Caucasian population, one in 1.83 trillion for the African-American population, and one in 129 trillion for the southeastern Hispanic population. At the conclusion of the hearing,

appellant argued that the state had failed to carry its burden to demonstrate that the FDLE database met the requirements of Frye. The trial court denied appellant's motion, saying that "nothing [had come] in to show [it] that [the database] was not properly used and not accepted in the scientific community."

Appellant's trial commenced on the day following the Frye hearing. At trial, the state offered Brown as its expert on DNA analysis. She again testified that she performed the analysis on the specimens collected during the investigation; that there was a mixture of DNA from two or more people in the vaginal swabs; that the victim was a minor donor of that DNA; and that appellant was a major donor. Over appellant's renewed objection, Brown testified that she computed population frequencies based on the FDLE population database; that the frequency of the DNA profile for the major donor of the sperm fraction was one in 289 trillion for the Caucasian population, one in 1.83 trillion for the African-American population, and one in 129 trillion for the southeastern Hispanic population. The jury found appellant guilty of sexual battery, as charged, and of the lesser-included offense of trespass in a structure. Appellant was subsequently adjudicated guilty, and sentenced to ten years in prison for the sexual battery conviction and one year in county jail for the trespass conviction. This appeal follows.

"[N]ovel scientific evidence is not admissible in Florida unless it meets the test

established in Frye v. United States, 293 F. 1013 (D.C. Cir. 1923),” which requires that such evidence “be sufficiently established to have gained general acceptance in the particular field in which it belongs.” Flanagan v. State, 625 So. 2d 827, 828 (Fla. 1993) (quoting Frye, 293 F. at 1014). Accord Hadden v. State, 690 So. 2d 573, 577-78 (Fla. 1997); Ramirez v. State, 651 So. 2d 1164, 1167 (Fla. 1995) (Ramirez II). When applying the Frye test, “the burden is on the proponent of the evidence to prove [by the greater weight of the evidence] 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.” Id. at 1168. This requires more than “[a] bald assertion by the expert that his deduction is premised upon well-recognized scientific principles.” Ramirez v. State, 810 So. 2d 836, 844 (Fla. 2001) (Ramirez III). As our supreme court has emphasized, “general scientific recognition requires the testimony of impartial experts or scientists. It is this independent and impartial proof of general scientific acceptability that provides the necessary Frye foundation.” Id. at 851.

Our standard of review when considering a trial court’s ruling on a Frye issue is de novo, rather than abuse of discretion. Murray v. State, 838 So. 2d 1073, 1077-78 (Fla. 2002); Ramirez III, 810 So. 2d at 844; Brim v. State, 695 So. 2d 268, 274 (Fla. 1997). Moreover, we must address the matter of general acceptance as of the time of appeal, rather than the time of trial. Ramirez III, 810 So. 2d at 844-45 (citing Hadden,

690 So. 2d at 579). In reaching our decision regarding general acceptance, we “may examine expert testimony, scientific and legal writings, and judicial opinions.” Hadden, 690 So. 2d at 579 (citing Flanagan, 625 So. 2d at 828). “Any doubt as to admissibility under Frye should be resolved in a manner that minimizes the chance of a wrongful conviction.” Ramirez III, 810 So. 2d at 853.

As our supreme court has noted, “DNA testing requires a two-step process, one biochemical and the other statistical. The first step uses principles of molecular biology and chemistry to determine that two DNA samples look alike. The second step uses statistics to estimate the frequency of the profile in the population. Both steps must satisfy the Frye test.” Butler v. State, 842 So. 2d 817, 827 (Fla. 2003) (citing Brim, 695 So. 2d 268). Here, appellant challenges the second step of the DNA testing process, contending that the trial court erroneously admitted population frequency statistics derived from the FDLE database because the state failed to establish that the FDLE database was generally accepted in the scientific community. We agree.

It is undisputed that, at trial, the state’s expert on DNA analysis relied exclusively on the FDLE database to compute the population frequencies to which she testified. Given the testimony of the state’s own witnesses at the Frye hearing that errors in the FDLE database had caused sufficient concern that a reexamination of the

entire database was ordered and that, pending completion of that reexamination (which had not yet occurred) only the FBI database was to be used, we believe that it was incumbent on the state to demonstrate that, notwithstanding that concern, the FDLE database was generally accepted in the scientific community. The state made no real effort to do that at any time in the trial court. It offered neither independent expert testimony nor evidence in the form of scientific literature. While we must address the matter of general acceptance as of the time of appeal, the state has not presented any evidence regarding revalidation of the FDLE database relied upon by its witness at trial, and our own research has failed to find any.

The state contends that, even if the trial court erred when it permitted testimony based on the FDLE database, reversal is not required because the error was harmless. In support of its contention, the state points out that appellant confessed. While this is true, at trial the defense took the position that the confession was involuntary, and the product of suggestion and coercion. It presented evidence that appellant was unsophisticated, and had a learning disability. Moreover, the victim was unable to identify her attacker. Finally, it is apparent that the state used the population frequency statistics for the purpose of convincing the jury that it was scientifically impossible for anyone other than appellant to have committed the crimes. Based upon a careful review of all the evidence offered at trial, we are unable to say, to the exclusion of all

reasonable doubt, that this error had no effect on the jury's verdict. See State v. DiGuilio, 491 So. 2d 1129, 1139 (Fla. 1986); Goodwin v. State 751 So. 2d 537 (Fla. 1999) (applying the DiGuilio test to non-constitutional errors). Accordingly, we conclude that the state has failed to carry its burden of demonstrating that the error was harmless.

The state next contends that, rather than reverse and remand for a new trial, we should remand the case to the trial court for a limited evidentiary hearing, citing Hudson v. State, 820 So. 2d 1070 (Fla. 5th DCA 2002). We disagree. Hudson relied on Miles v. State, 694 So. 2d 151 (Fla. 4th DCA 1997), which, in turn, relied on Brim v. State, 695 So. 2d 268 (Fla. 1997). The distinguishing characteristic between those three cases and this is that in those cases no Frye hearing had been conducted. As a result, the information necessary to make an intelligent decision on appeal regarding compliance with Frye was not present in the record. Here, no such deficiency exists. Appellant made a specific Frye challenge, arguing that FDLE, itself, had sufficient concern regarding its database to order reexamination of the entire database and to direct that, pending completion of that reexamination, the database not be used. The trial court held a Frye hearing at which the state was afforded every opportunity to demonstrate that the FDLE database satisfied Frye. For reasons known only to it, it elected not to do so. Given these circumstances, the situation is no different from any



other appeal based on an evidentiary error, where the appellee might have demonstrated admissibility in the trial court, but did not. As in those cases, we believe that remand for a new trial is the appropriate remedy here.

Appellant's convictions are reversed, and the case is remanded for a new trial.

We conclude that appellant's other arguments are either without merit or moot.

REVERSED and REMANDED, with directions.

KAHN and BROWNING, JJ., CONCUR.