

Superior Court of Delaware

STATE of Delaware,

v.

Richard ROTH, Jr., Richard Roth, Sr., Moises Ordorica,

Defendants.

ID Nos. 9901000330, 9901000322, 9901002572.

Submitted April 22, 2000.

Decided May 12, 2000.

Upon Defendants' Motion in Limine to Exclude DNA Evidence: Granted in Part.

ORDER

GEBELEIN, J.

Upon Defendant Richard Roth, Jr.'s Motion in Limine to exclude certain DNA evidence from introduction at trial, it appears to the Court that:

1. James Anderson, Richard Roth, Jr., Richard Roth, Sr., and Moises Ordorica are charged with two counts of Murder in the First Degree, as well as related charges, in connection with a December 31, 1998 robbery at J & R Mexican Supermarket in Newport. It is alleged that on New Year's Eve at approximately

8:00 p.m., Roth, Jr., Roth, Sr., and Anderson drove to the J & R Supermarket in Roth, Sr.'s vehicle. While Roth, Sr. remained in the vehicle, Roth, Jr. and Anderson entered the store and demanded United States currency from the victims, Jaime Antunez and Marisella Rodriguez. The State contends that Antunez grabbed for Anderson's gun which discharged striking Anderson in the hand and head, and Roth, Jr. then shot Antunez several times. The defendants allegedly drove in Roth, Sr.'s vehicle to Anderson's residence at 503 South Maryland Avenue where they treated Anderson's wounds.

2. During the course of the police investigation that followed, the Delaware State Police collected blood evidence from the scene of the robbery, from 503 South Maryland Avenue, and from Roth, Sr.'s vehicle. DNA extractions of the blood evidence were performed by the Office of the Chief Medical Examiner and those extractions were submitted to ReliaGene Technologies, Inc. ("ReliaGene") for DNA testing.

3. Through STR DNA analysis, the extractions were compared against blood samples of the defendants and the victim. ReliaGene concluded that several of the "single source" samples matched the defendants or the victim. ReliaGene Sample # 99-9981, a blood sample from the suspect's vehicle, is referred to as a "mixed sample" because it contains the DNA of two or more persons. This sample was found to be "consistent with a mixture of the reference samples of the

suspects, James Anderson and Richard Roth, Jr., and at least one other DNA

donor." According to ReliaGene, 50.2% of the population could be "excluded as a possible donor to this sample."

4. Defendant Roth, Jr. does not contest the single source DNA evidence, but the defendant does dispute the admissibility of the mixed sample, ReliaGene Sample # 99-9981. Defendant has filed a motion in limine to exclude this mixed sample arguing that the results do not meet the Daubert/Nelson requirements for admissibility of scientific evidence. The defense argues that the State has not met its burden of establishing that the generally accepted laboratory procedures were followed and that the scientific methodology used by ReliaGene to analyze mixed samples was generally accepted in the scientific community.

5. A Daubert hearing was held on March 24, 2000 to determine the admissibility of DNA evidence in this case. The Court heard testimony from Dr. Joseph Warren, Assistant Laboratory Director for ReliaGene; and Robyn Quinn, a forensic DNA analyst for the Office of the Chief Medical Examiner of Delaware. The parties briefed the issue of admissibility of the DNA evidence and this is the Court's decision in that matter.

In order to be admissible, scientific evidence must satisfy the pertinent Delaware Rules of Evidence concerning the admission of scientific testimony or evidence. *Nelson v. State*, Del.Supr., 628 A.2d 69 (1993). The Delaware Supreme Court has adopted the federal interpretation of Federal Rules of Evidence 702 as set forth in *Daubert v. Merrell Dow Pharmaceuticals, Inc.* 509 U.S. 579 (1993). In deciding issues of

scientific evidence, Delaware Courts have relied on Daubert's five factor test in which the trial court must determine whether:

1. The expert witness is qualified (D.R.E.702);
2. The evidence is otherwise admissible, relevant, and reliable (D.R.E. 401 and 402);
3. The bases for the opinion are those reasonably relied upon by experts in the field (D.R.E.703);
4. The specialized knowledge being offered will assist the trier of fact to understand the evidence or determine a fact in issue (D.R .E. 702), and
5. The evidence does not create unfair prejudice, confuse the issues, or mislead the jury (D.R.E.403). *Id.*; *Nelson*, 628 A.2d at 74.

7. Because the defendant concedes that the State has met the Daubert criteria as to the single source DNA evidence, the Court only needs to determine the

admissibility of the mixed sample referred to as ReliaGene Sample # 99-9981. Furthermore, with regard to the disputed mixed sample, the defendant has narrowed his arguments regarding the admissibility of the sample to factors three and five of the Daubert test. Specifically, Defendant argues that while the technique of replicating DNA from the STR testing process is universally

recognized, the scientific methodology and ability to interpret the results of mixed samples is not, and therefore, the State failed to demonstrate that ReliaGene's findings were reliable or reasonably relied upon experts in the field. Secondly, Defendant argues that the introduction of this sample is of limited probative value, and any slight probative value is outweighed by its uncertain scientific reliability.

8. The Court finds that the Daubert factors are met with the exception of factor five, the unfair prejudice prong. The State must satisfy Rule 403's requirement that evidence be more probative than prejudicial. Here, ReliaGene has concluded that 50.2 percent of the population would be excluded as possible donors to the genetic profile generated for sample # 99-9981. Basically, the result includes half of the residents of Delaware as possible donors of that sample. When the expert could give no greater certainty than a 50 percent probability that the defendant was the donor, the Court finds the probative value of this testimony to be very limited. A result which includes 50 percent of the population as possible donors, is not a conclusive result.

The State argues that "ReliaGene's conclusion that Roth, Jr. falls in that 50% of the population that could have contributed to # 9981 is probative, in light of the facts set forth herein and goes to the weight of the evidence, not the admissibility." The Court finds, however, that while the conclusion that the defendant falls into that 50 percent of the population goes to the weight of the evidence, a conclusion of 50 percent probability is of extremely limited probative value and the probative value is far outweighed by the danger of prejudice to the defendant.

9. The Court finds that the risk of prejudice to the defendant if this sample is introduced to a jury is great. It is likely that the defendant would be prejudiced by the expert testimony that the defendant is "included" in the population that could have contributed to the sample, and that his DNA is a "match" for the sample of mixed blood. The danger of misleading the jury, confusing the issues, or of creating undue prejudice to the defendant is extremely great when words like "match," "included" and "not excluded" are used by a DNA expert witness.

10. The Court concludes that the probative value of the mixed sample is nearly non-existent; however, the potential for undue prejudice to the Defendant is great. The Court cannot risk the potentially prejudicial impact that expert testimony stating that the defendant was the donor, for the limited probative value of a 50 percent probability. Because the probative value is slight and

the risk of confusion is great, the prejudicial effect outweighs the probative value of this testimony. Therefore, the testimony regarding ReliaGene Sample # 99-9981 is inadmissible. Testimony regarding the single source DNA is admissible, as is the other mixed samples where the probability factor is 99 percent or greater.

For the foregoing reasons, the Defendant's Motion in Limine is GRANTED as to sample # 99-9981.

IT IS SO ORDERED.