

Letters to the Editor

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Whose DNA?

To the Editor:

The use of DNA evidence in criminal and civil court cases is growing, although it is by no means certain that DNA evidence will be ruled admissible in any particular court (Lander 1991). We were struck by the lack of clear thinking in one recent court decision where DNA evidence was ruled inadmissible.

Mr. Arthur Passino stood accused of homicide in the state of Vermont, and a pretrial hearing on the admissibility of DNA evidence was held in May of this year. A key factor in the hearing was the testimony of Mr. Passino's mother, to the effect that her father was a full-blooded Native American and that her mother was half-French and half-native American. Mr. Passino's paternal grandparents were Italian.

In his opinion and order denying the introduction of DNA testing evidence (*State v. Passino*, 185-1-90, Dis. Ct. Franklin County, VT, May 13, 1991), Judge R. F. Kilburn noted that "it is unclear which, if any of the FBI's databases is appropriate for calculating the probability of a coincidental match." He then went on to say that "the defendant has proffered evidence that he belongs to an ethnic group whose genotypic frequencies may occur more frequently than the FBI's estimate."

Once a match has been declared between the DNA profiles of crime-scene material and a suspect, the FBI calculates the frequency of that profile in the population. This calculation is to provide an indication of how likely it would be to find that profile in a random member of the population. In *State v. Passino*, the court apparently was not told that these calculations

are of interest only under the hypothesis that the crime-scene material came from someone other than the suspect. If the suspect did not provide the crime-scene material, then his ethnic background is quite irrelevant. (If he did provide the crime-scene material, then there is no need to consider random members of the population.) This point was suggested tentatively by Wooley (1991) but seems to have been missed by Lander (1991).

We have some doubt that Judge Kilburn's concern for the use of an appropriate data base on which to base frequency calculations is well founded, but we are concerned mainly that courts in future trials will be fully informed as to the reason these calculations are made.

On June 18, 1991 Mr. Passino was convicted of involuntary manslaughter.

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References

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