

Miller, Robert

Testimony of Moses Schanfield

1 THE COURT: Call your next.

2 MOSES SCHANFIELD,

3 called as a witness on behalf of the State of Oklahoma,
4 having been first duly sworn, testified as follows:

5 DIRECT EXAMINATION

6 BY MR. ELLIOTT:

7 Q Would you state your full name for the record, please?

8 A Moses Samuel Schanfield.

9 Q Would you spell your last name, please?

10 A S-C-H-A-N-F-I-E-L-D.

11 Q And what is your profession or occupation?

12 A I'm a human geneticist employed by Allo-type Genetic
13 Testing as laboratory director.

14 Q Where is that located?

15 A It's in Atlanta, Georgia.

16 Q And briefly could you tell us what that is?

17 A Allo-type Genetic Testing is a company that performs
18 genetic marker testing on physical evidence submitted in
19 criminal or civil matters. It does cases of disputed
20 parentage and does contract genetic marker testing for
21 medical research.

22 Q Okay. Briefly explain to the ladies and gentlemen of
23 the jury what type of testing you go -- that you provide when
24 you are submitted a particular bloodstain or semen stain.

25 A The primary reason that people send evidence to us

1 is for what we call allotyping, A-L-L-O-T-Y-P-I-N-G, which is
2 typing for a genetic marker's antibody molecules. Antibodies
3 make up about 20 percent of the plasma protein in blood and
4 represent a much lower concentration but are found in semen
5 and other body fluids. So, they are useful forensically.

6 The markers are tested by a test which we call
7 agglutination inhibition. It's a serological test. It's --
8 each of the different genetic markers is detected by a
9 specific antisera or blood typing reagent. It is different
10 from electrophoresis in that we do not use electricity to
11 separate the genetic markers.

12 There are approximately 15 markers that are
13 useful forensically. They are tested for by making a liquid
14 extraction of the item tested, whether it's blood or body
15 fluids. That is put into a test system which includes red
16 blood cells, which are used to indicate whether a reaction
17 has occurred, and a specific antibody. If the marker is
18 present, it blocks the reaction or inhibits the reaction so
19 we don't see the cells sticking together. If the material is
20 not present or it is in such a low amount that inhibition
21 does not occur, the cells stick together or what we call
22 agglutinated. So, a negative result is agglutination, a
23 positive result or the marker being present is determined by
24 inhibition.

25 We can type extracts from material that's

1 been stored for long periods of time. They're very stable
2 forensically, and they're very discriminatory.

3 They also are one of the few markers that has
4 very different distributions in different races. So, you can
5 use them to racially identify blood specimens or body fluids.

6 Q And how long have you been involved in such type
7 testing?

8 A I started doing this testing in 1966 just after I
9 graduated from the University of Minnesota as an
10 undergraduate. I did my PhD thesis on it in the period of
11 1969 to 1971. And I've been doing it more or less
12 continuously since then.

13 Q In your position there with Allo-type Genetic Testing,
14 Incorporated, did you receive some evidence from Joyce
15 Gilchrist here in the Oklahoma City forensic laboratory in
16 reference to the rape/homicide of Zelma E. Cutler?

17 A Yes. On the 28th of September, 1987, we received 20
18 items of evidence. And then in January -- January 15th we
19 received three additional items of evidence.

20 Q Total of 23?

21 A Total of 23 items.

22 MR. ELLIOTT: May I approach the witness, Your
23 Honor?

24 THE COURT: Yes.

25 Q (By Mr. Elliott) I'll now hand you what's been marked

1 and introduced into evidence as State's Exhibit Numbers 89A,
2 100, 128, 129, 130, 131, 132, and 133, and ask you to look at
3 those please, Doctor. Do you recognize those items that I
4 just handed you?

5 A These are all items of evidence that have been
6 submitted to us for testing that were part of the case that
7 was started in September of 1987.

8 Q And how do you recognize each of those individually
9 marked items?

10 A They all have a label which has our name, address, and
11 telephone number, and each item has a unique sample number
12 which is assigned with each case.

13 Q Okay. And what were the conditions of each of those
14 items when you received them?

15 A I have to check my notes, but to the best of my
16 recollection, they were all sealed and enveloped in evidence.
17 envelopes. To the best of my notes, they were all received
18 as sealed items.

19 Q Now, did you do any analysis in conjunction with your
20 business and occupation in reference to those items that I
21 just handed you which you received from Oklahoma City?

22 A These were -- all 23 items on two different occasions
23 were tested for immunoglobulin.

24 Q And did you arrive at some conclusion based upon your
25 testing and your analysis?

1 A The conclusions that we reached based on testing these
2 was that the samples from the known individuals were all
3 different from each other; that the suspect, Robert Miller,
4 had markers that were foreign to the victim, that would not
5 be mass by the victim. The markers were not found on any of
6 the control material indicating that the genetic markers we
7 found were property of the stains on the cloth and not part
8 of the cloth inherently. That the -- some of the stains that
9 we found, bloodstains, were consistent only with the victim,
10 and that some of the material found was consistent with a
11 mixture of the victim's type and foreign markers. The
12 foreign markers, which I will call GM-2 and KM-1, are
13 consistent with the suspect, Robert Miller; however, they are
14 also consistent with about one in three blacks and
15 approximately half of one percent of the U.S. white
16 population.

17 Q Okay. Based upon your analysis and your conclusions,
18 were you able to arrive at any percentages as to an opinion
19 as to whether the semen donor was either black, white, or of
20 another race?

21 A In comparing between if the semen -- the questions's
22 whether the semen donor's black or white, there is a
23 probability of about 98.3 percent that the semen donor would
24 be black and a probability of about 1.7 percent that the
25 semen donor would be white.

1 We did not make a comparison to say a black to
2 a Mexican/American or Mexican/American to a white. The value
3 would be somewhere less than that if we were comparing a
4 black to a Mexican/American.

5 Q If I understood you correctly, was 98.33 percent that
6 the assailant was black and only 1.67 percent that the
7 assailant could have been white.

8 A That's correct.

9 Q Doctor, are you able through your analysis and through
10 your education and training and experience to -- I'm not sure
11 what the phrase that I want to call it -- can you put a
12 percentage on how many people in the percentage race possess
13 these characteristics that you've identified?

14 A Approximately one in three blacks would be able to
15 contribute the semen and about one out of 180 whites.

16 Q Okay. Perhaps I'm showing my ignorance here, Doctor.
17 You were able to determine or can you determine
18 or did you determine in percentages of the black population
19 that would possess the blood type which you've identified and
20 the other markers in which you've identified, in percentage
21 wise, as opposed to the numbers one out of so and so? Did
22 you develop any percentages?

23 A For the two markers we found that were foreign to the
24 victim, it would be about 33 percent of the black population
25 and about .6 percent of the white population.

1 Am I answering your question?

2 MR. ELLIOTT: No further questions at this
3 time, Judge.

4 THE COURT: You may cross-examine.

5 CROSS-EXAMINATION

6 BY MR. EVANS:

7 Q Now, Dr. Schanfield, it is Schanfield and not
8 Schanfield; right?

9 A Schanfield, yes.

10 Q Schanfield. Dr. Schanfield.

11 You also did some examinations in regard to the
12 homicide of Miss Fowler; is that correct?

13 A Yes, sir.

14 Q You were asked to do that by the Oklahoma City lab
15 here; right?

16 A That's correct.

17 Q And you could reach no conclusions that would be
18 helpful to the determination of this case in regard to Miss
19 Fowler; is that right?

20 A May I refresh my memory by looking at my notes?

21 Q Sure. It's okay with me.

22 A That file is outside. I didn't realize I was going to
23 need it.

24 Do you have a copy of the report?

25 Q Yes.

1 THE COURT: Yes.

2 MR. EVANS: May I approach the witness?

3 THE COURT: Yes.

4 Q (By Mr. Evans) I think that's the report, Doctor.

5 A Yes. Thank you.

6 Okay. I can answer your question.

7 Q Okay.

8 A There were -- no results were obtained. Detect no
9 allotypes or no conclusive allotypes. So, basically we had an
10 inconclusive result.

11 Q So, you tried to come to some scientific conclusion
12 that would be helpful to this case with regard to the
13 homicide then of Miss Fowler, but you cannot; is that right?

14 A That's correct.

15 Q Okay. And as to Miss Cutler, you're telling the jury
16 and the Court that based on the allotypes that were foreign
17 to Miss Cutler that you found, you can say that one out of
18 three black people have those allotypes.

19 A That's correct.

20 Q Thirty-three percent of all black people have those
21 allotypes.

22 A That's correct.

23 Q You've flown all the way from Atlanta to tell us that
24 several million black people have these characteristics;
25 right?

1 A I haven't tested several million, but yes.

2 MR. EVANS: Nothing further.

3 THE COURT: Any further direct examination?

4 MR. ELLIOTT: No further questions, Judge.

5 THE COURT: Thank you. You may stand down.

6 Come up, gentlemen.

7 (At this time a brief off-the-record discussion was
8 had outside the hearing of the jury.)

9 THE COURT: Members of the jury, we moved a
10 little more swiftly than we anticipated we would, and we're
11 thankful that we did. However, we've run out of witnesses
12 for today at least. It will be necessary that we adjourn a
13 little bit early. I'm sure that saddens you, but we will.

14 Let me talk to the lawyers just one more
15 moment.

16 (At this time a brief off-the-record discussion was
17 had outside the hearing of the jury.)

18 THE COURT: There will only be perhaps three
19 other relatively short live witnesses, and, as you've been
20 told before, you will view some video tapes. They will be
21 rather extensive. I will, of course, give breaks in between
22 those. But that's what we'll do Monday. The equipment will
23 be set up over the weekend so we can get right to that.

24 Do not discuss this case with families or
25 friends or anyone over the weekend. Leave it right here.