

**Miller, Robert**

Testimony of Joyce Gilchrist

1 | is that right?

2 A Yes, sir.

3 Q And in fact he needed a ride. He told you that. A  
4 ride was provided. He voluntarily came back to the station  
5 the following Monday; is that correct?

6 A That's correct.

7 Q So, he complied with every single request that you or  
8 Flowers made of him in your contact with him, didn't he?

9 A I believe so, yes.

10 Q When you took the hairs, you were trying to take a  
11 sufficient sample of hairs from Robert Miller to compare with  
12 hairs that might have been found at the scene of the crime;  
13 is that right?

14 A That's correct.

15 Q How many hairs initially did you take from Robert?

16 A On Saturday the 21st I don't recall. I think I  
17 attempted to pull somewhere in the neighborhood of 20, 25,  
18 something like that, hairs. I'm not sure exactly how many.

19 MR. EVANS: Pass the witness.

THE COURT: Further direct?

21 MR. MACY: No redirect, Your Honor.

THE COURT: Thank you. You may stand down.

Call your next.

24 JOYCE A. GILCHRIST,

25 called as a witness on behalf of the State of Oklahoma.

1 having been first duly sworn, testified as follows:

2                           DIRECT EXAMINATION

3 BY MR. ELLIOTT:

4 Q       State your full name, please.

5 A       My name is Joyce A. Gilchrist.

6 Q       How are you employed?

7 A       I'm a forensic chemist with the Oklahoma City Police  
8 Department.

9 Q       And how long have you been so employed?

10 A      For eight years.

11 Q      Can you tell us briefly what are your duties and  
12 responsibilities as a forensic chemist for the police  
13 department?

14 A      I analyze the evidence that is submitted to our lab in  
15 reference to cases of rapes and homicides.

16                          THE COURT: Miss Gilchrist, could you kind of  
17 face toward Mr. Elliott and toward us a little more so the  
18 court reporter can catch things a little better?

19 A      Rapes and homicides, hit and runs, manslaughters,  
20 indecent liberties, and that sort of thing.

21 Q      (By Mr. Elliott) Okay. And can you relate what your  
22 educational background and training is for us, please?

23 A      Yes, I can.

24                          I have a bachelor of science in forensic  
25 science from Central State University in Edmond, Oklahoma,

1 and I've attended a number of professional schools since my  
2 employment at the police department.

3 I've attended the FBI Academy in Quantico,  
4 Virginia, where I received training in basic forensic  
5 serology, the examination and identification of hairs,  
6 fibers, and other types of textile materials. And I also  
7 attended an international symposium on forensic hair  
8 comparisons held at Quantico, Virginia. I've attended Baton  
9 Rouge, Louisiana, where I received training in the human  
10 allotype -- human allotyping immunoglobulin techniques taught  
11 by Dr. Moses Schanfield. I received training at our OCPD  
12 forensic laboratory in the isoelectric focusing techniques of  
13 detecting genetic polymorphisms. I've attended the  
14 Serological Research Institute in Emeryville, California,  
15 where I received training in the advanced electrophoretic  
16 techniques of bloodstain analysis in forensic serology, the  
17 electrophoretic techniques of semen analysis in forensic  
18 serology. I've attended the Southwest Homicide Investigative  
19 Seminar held in Norman, Oklahoma, and Oklahoma City, and I've  
20 also been an instructor at those same seminars. I've  
21 attended the Central U.S. Police Institute here in Oklahoma  
22 City where I received training in the geometric  
23 interpretation of bloodstains and their flight patterns. I  
24 conducted my forensic science practicum at the Oklahoma City  
25 Police Department. And I've been certified by the Council on

1 law enforcement, education, and training as a police  
2 instructor for the State of Oklahoma.

3 Q During your course of employment with the Oklahoma  
4 City Police Department as a forensic chemist, have you had an  
5 occasion to withdraw or to draw, I should say maybe,  
6 bloodstains from individuals in reference to particular  
7 cases?

8 A I have.

9 Q Approximately how many times?

10 A Hundreds of times.

11 Q Okay. Could you give us a brief description of the  
12 manner and technique in which you do these?

13 A Of drawing samples, collecting samples?

14 Q Of blood samples.

15 A Of blood samples.

16 I received my training, first of all, from  
17 University Hospital, and so I'm a certified phlebotomist.

18 I tell the person what I'm going to do first,  
19 prior to doing that. I lay my utensils on the table beside  
20 that individual. It will be a vacutainer needle plus a  
21 vacutainer tube, the -- I can't think if it now -- the tubing  
22 or the tie I use around the arm, alcohol swabs and cotton.  
23 And then I proceed to examine both arms to determine which  
24 arm would be most suitable for drawing a sample of blood  
25 from. And I ask them to hold their arm our straight, make a

1 fist, and then I apply the tourniquet, clean the area, and  
2 then go ahead and draw the blood, and later submit it to our  
3 laboratory.

4 Q Also in your course of employment with the Oklahoma  
5 City Police Department as a forensic chemist, have you had an  
6 occasion to take saliva samples from individuals?

7 A I have.

8 Q Approximately how many times?

9 A Again, hundreds of times.

10 Q Okay. Again, would you tell us briefly the procedures  
11 you go through in doing that?

12 A We use a clean piece of filter paper that's been -  
13 stamped on the end that tells us not to handle it beyond a  
14 certain point. I will turn the filter paper toward the  
15 individual, explain to them that I want them to drop a sample  
16 of saliva onto the filter paper approximately the size of a  
17 nickle. Now, I'm just asking them to spit onto the paper,  
18 and they do so, and I sit it over to the side so it can air  
19 dry and I proceed to collect other samples.

20 Q I want to direct your attention back to February the  
21 23rd of 1987 and ask if you were employed by the Oklahoma  
22 City Police Department at that time and on duty.

23 A I was.

24 Q Did you have an occasion to come in contact with a  
25 person identified to you by the name of Robert Lee Miller?

1 A I did.

2 Q And do you see him in the courtroom today?

3 A I do.

4 Q Would you point him out, tell us where he's seated and  
5 briefly how he's dressed?

6 A He's a black man sitting at the defense table. He's  
7 in an aqua colored shirt, short sleeve shirt.

8 MR. ELLIOTT: May the record reflect she's  
9 identified the defendant?

10 THE COURT: Yes.

11 Q (By Mr. Elliott) For what reason did you come in  
12 contact with Mr. Miller on that day?

13 A I was informed by the detectives that he had signed a  
14 waiver to give up body samples and they wanted me to draw a  
15 sample of blood and get a saliva sample from him.

16 Q Okay. And did you do that?

17 A I did.

18 Q And did you follow the techniques in which you briefly  
19 described for the jury?

20 A I did.

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

23 THE COURT: Yes.

24 Q (By Mr. Elliott) I hand you what's been marked for  
25 identification purposes as State's Exhibits 49 and 50 and

1 ask you to examine those, please.

2 A I have.

3 Q Can you tell me what those are?

4 A I can.

5 Q Okay. What are they?

6 A State's Exhibit Number 49 is an empty vial. At one  
7 time it contained a liquid blood sample obtained from Robert  
8 Lee Miller.

9 State's Exhibit 50 is a white envelope  
10 containing a saliva sample obtained from Robert Lee Miller.

11 Q How do you know those are the ones you obtained from  
12 Robert Lee Miller?

13 A Because my initials and case number and item numbers  
14 are on these items.

15 Q What did you do with those items after you obtained  
16 the samples from Mr. Miller?

17 A I submitted them to our laboratory.

18 Q In what condition?

19 A In a sealed and closed condition.

20 MR. ELLIOTT: No further questions at this  
21 time, Your Honor.

22 THE COURT: You may cross-examine.

23 MR. EVANS: I have no questions of Miss  
24 Gilchrist at this time, Your Honor.

25 THE COURT: At this time.

1                   All right. Thank you.

2                   THE WITNESS: Thank you, Your Honor.

3                   THE COURT: You may stand down.

4                   Call your next.

5                   MR. MACY: Yes, sir.

6                   May it please the Court.

7                   LARRY BALDING,

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

10                  DIRECT EXAMINATION

11                  BY MR. MACY:

12                  Q         State your name, please, sir.

13                  A         My name is Larry Balding.

14                  Q         What is your occupation or profession, sir?

15                  A         I'm employed as a medical doctor specializing in  
16                   forensic pathology by the Office of the Chief Medical  
17                   Examiner here in Oklahoma City.

18                  Q         What is your official position there, sir?

19                  A         My official position is a deputy medical examiner.

20                  THE COURT: Is what?

21                  THE WITNESS: A deputy medical examiner.

22                  Q         (By Mr. Macy) What is your educational or  
23                   professional background, Doctor?

24                  MR. EVANS: Your Honor, I would offer a  
25                   stipulation at this time that Dr. Balding is an eminently

1                   Get her name in the record, please.

2                   JOYCE A. GILCHRIST,

3       recalled as a witness on behalf of the State of Oklahoma,  
4       having been previously sworn, testified as follows:

5                   DIRECT EXAMINATION

6       BY MR. ELLIOTT:

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

8       A       My name is Joyce A. Gilchrist.

9       Q       And you're the same Joyce Gilchrist who testified here  
10      yesterday?

11      A       I am.

12      Q       I'm going to ask you if in -- or have as  
13      responsibilities in the course of your employment as a  
14      forensic chemist for the Oklahoma City Police Department if  
15      you received evidence in reference to an attempted burglary  
16      of [REDACTED].

17      A       I did.

18      Q       And can you tell the ladies and gentlemen of the jury  
19      what you received?

20      A       Well, I actually submitted the evidence myself. I  
21      submitted a swabbing of bloodstain taken from a door at the  
22      residence of 3308 North Lake.

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

25                   THE COURT: Yes.

1 Q (By Mr. Elliott) I hand you what's been introduced  
2 into evidence as State's Exhibit 112 and ask you to look at  
3 that, please. Can you tell me what that is?

4 A It's a photograph of the door, some prints on it.

5 Q Now, I'll hand you what's been marked for  
6 identification purposes as State's Exhibit 114 and ask you if  
7 you can identify that.

8 A I can.

9 Q And what is 114?

10 A State's Exhibit 114 is an evidence envelope containing  
11 swabbings of bloodstains taken from a door.

12 Q From the door that's depicted in State's Exhibit ~  
13 Number 112?

14 A Pardon me?

15 Q From the door exhibited in State's Exhibit 112?

16 A That's correct.

17 Q Now, what did you do after you removed the bloodstain  
18 swab from the door?

19 A I submitted them directly to our laboratory.

20 Q And then at some later date did you perform any tests  
21 or analyses?

22 A I did.

23 Q Could you tell us what you did, please?

24 A Yes. I submitted the swabbings to a test we call  
25 electrophoresis and also ABO typing to determine the blood

1 type of the stain taken from the door.

2 Q Okay. Were you able to determine the ABO blood type  
3 of the blood removed from the door?

4 A I was.

5 Q And what was that?

6 A It was type "A."

7 Q Were you able to arrive at any other results as a  
8 result of the electrophoresis exam?

9 A No, I wasn't. My results were negative.

10 Q And do you have an explanation for that?

11 A The stain wasn't concentrated enough.

12 MR. ELLIOTT: No further questions.

13 Well, at this time, Your Honor, we move to  
14 introduce State's Exhibit 114.

15 THE COURT: Any objection?

16 MR. EVANS: No, sir.

17 THE COURT: It's admitted.

18 MR. ELLIOTT: No further questions, Judge.

19 THE COURT: You may cross-examine.

20 CROSS-EXAMINATION

21 BY MR. EVANS:

22 Q Miss Gilchrist, educate me as to one aspect of the  
23 bloodstain that you typed and you found out that it was "A."  
24 Now, you could tell whether the blood came from an "A" person  
25 whether or not that person was a secretor or not; is that

1 right?

2 A No, it's not correct.

3 Q Okay. So, we know the person who donated that blood  
4 is a secretor; right?

5 A I don't know that.

6 Q You don't know whether he's a secretor or not from  
7 your test on the blood.

8 A That's correct.

9 Q Okay. Let me back up then.

10 If you took a sample of my blood, regardless of  
11 the fact whether or not I was a secretor, whether I secreted  
12 my blood type in my other secretions, my tears, my saliva;  
13 you could take my blood and test my blood type; is that  
14 right?

15 A That's correct. Mr. Evans, secretor status is a  
16 totally different test. It's not -- it's associated with  
17 blood types, but it's not -- you don't determine that from  
18 doing a blood typing examination. Okay? That's a totally  
19 different test in itself, independent of blood typing.

20 Q All right. Miss Gilchrist, where I'm going is from  
21 the results, the analyses you did on this stain on the door  
22 of Miss [REDACTED] house, all we can tell is that the person  
23 who donated it is "A" type; is that right?

24 A That's correct because it was a dried stain. When I  
25 determine secretor status on a blood sample, it has to be

in a liquid state.

2 Q Okay. Tell the jury and Court, if you would, how  
3 many -- the percentage of the black male population are "A."

4 A Percentage of the black population who has type "A" is  
5 approximately 26 percent. And if you assume at least half  
6 the population are male, that reduces it down to 13 percent  
7 approximately.

8 | Q Okay.

9 MR. EVANS: No further questions.

10 THE COURT: The State? Anything further?

11 MR. ELLIOTT: No, Your Honor, not at this time.

12 THE COURT: Thank you.

13 THE WITNESS: Thank you.

14 THE COURT: You may stand down.

15 Call your next, State.

16 MR. MACY: May we approach, Your Honor?

17 THE COURT: All right.

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

20 THE COURT: Members of the jury, we'll take a  
21 little earlier recess than normally we would, and I'll  
22 explain why. As I told you earlier, the State obviously is  
23 dividing its proof as to the three separate incidents that  
24 are charged in this case. The State has now completed its  
25 evidence as to the second incident, we'll call it. The

1 next one will be the third one that you heard testimony  
2 about, some at least before. Rather than put the first  
3 witness on whose testimony we'd have to interrupt sometime in  
4 the middle of it, we'll just recess now. It's not that much  
5 earlier than noon anyway. I'll ask you to be back before  
6 1:30 in the jury room.

7 You may, again, remain in there if you care to,  
8 go to lunch and come back. Whatever you care to do. But be  
9 back up there a little before 1:30.

10 We'll excuse the defendant now.

11 (The defendant exited the courtroom at this time.)

12 THE COURT: Remember that you must not discuss  
13 the case during the lunch recess at all with anyone, nor  
14 permit anyone to discuss it with you.

15 Please be back in the jury room by 1:30.

16 You may be excused until then.

17 (Whereupon, said lunch recess was had, after which the  
18 following transpired in open court:)

19 THE COURT: We'll continue.

20 The State may call its next.

21 MR. MACY: May it please the Court.

22 GRAHAM M. ROBERTSON,

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

25 DIRECT EXAMINATION

1 on that heater prior to the time that you did your  
2 investigation?

3 A No, sir.

4 Q In many homes the electricity affects the thermostat.  
5 In that home with the electricity being on or off have any  
6 effect on those type of gas heaters?

7 A No, sir.

8 MR. MACY: No further questions.

9 Your witness.

10 THE COURT: You may cross-examine.

11 MR. EVANS: Not based on that, no, sir.

12 THE COURT: Thank you. That's all.

13 Call your next.

14 MR. MACY: Yes, Your Honor.

15 THE COURT: You've been sworn and you're still  
16 testifying under oath.

17 THE WITNESS: Thank you, Your Honor.

18 JOYCE A. GILCHRIST,

19 recalled as a witness on behalf of the State of Oklahoma,  
20 having been previously sworn, testified as follows:

21 DIRECT EXAMINATION

22 BY MR. ELLIOTT:

23 Q State your full name again for the record, please.

24 A My name is Joyce A. Gilchrist.

25 Q And you're the same Joyce Gilchrist that's testified

1 I believe two times earlier in this case.

2 A I am.

3 Q Now, I'd like to ask you at this point in reference --  
4 in reference to the [REDACTED] homicide.

5 Okay. In your capacity as a forensic chemist  
6 with the Oklahoma City Police Department, did you receive  
7 items of evidence in reference to the homicide of [REDACTED]  
8 [REDACTED]?

9 A I did.

10 Q Would you for the ladies and gentlemen of the jury and  
11 the Court tell us what items you received?

12 A Okay. The following evidence was submitted on 1-12-87  
13 by Specialist C. Goforth. These items were obtained from  
14 1142 Northwest 31 Street, Oklahoma City: Hairs taken from  
15 top of bed, eight inches north of the victim's neck; hair  
16 from bottom pillow, one foot south of the victim's head;  
17 hairs from throat area of victim; one broken finger or  
18 toenail on top of bed, one foot two inches south of victim's  
19 left leg; one black sock; one knotted white pillow case; one  
20 small pillow; two white pillows from under the victim's head;  
21 one flat white sheet.

22 The following evidence was submitted on 1-13-87  
23 by Specialist Kent Harville. These items were obtained from  
24 [REDACTED]: One vial of blood; two oral swabs; four  
25 vaginal fornix swabs; two vaginal cervix swabs; two rectal

1 swabs; fingernail clippings, left hand; fingernail clippings  
2 from the right hand; scalp hairs; pubic hair combing; pubic  
3 hairs; one nightgown; one brown paper sack from left hand;  
4 one brown paper sack from right hand; one hair clip; one flat  
5 top sheet from Amcare; one flat body sheet from Amcare; one  
6 paper morgue sheet.

7                 The following evidence was submitted on 1-13-87  
8 by Specialist C. Goforth. This item was obtained from 1142  
9 Northwest 31st Street in Oklahoma City: Eight pieces of wood  
10 from the west door and window framing.

11                 The following evidence was submitted on 1-20-87  
12 by Forensic Chemist Thomas C. Kupiec. These items were  
13 obtained from a Ra-Heru Khepra, also known as Roderick  
14 Wilson: One vial of blood; saliva sample; scalp hairs from  
15 the left side of head; scalp hairs, top of head; scalp hairs,  
16 back of head; scalp hair from the right side of the head;  
17 beard hairs; chest hairs; left arm hairs; right arm hairs;  
18 pubic hairs; left leg hairs; right leg hairs.

19                 The following evidence was submitted on 1-28-87  
20 by Detective Jerry Flowers. These items were obtained from  
21 Jesse McDonald, Jr.: One small tube of blood and dried  
22 stain; scalp hairs from top of head; scalp hairs from back of  
23 head; scalp hairs from left side of head; scalp hairs from  
24 right side of head; left arm hairs; right arm hairs; pubic  
25 hairs; left leg hairs; and right leg hairs.

1                 The following evidence was submitted on 1-29-87  
2 by Forensic Chemist Joyce Gilchrist, and these items were  
3 obtained from Ernest E. McDonald: One vial of blood; scalp  
4 hairs; a saliva sample; scalp hairs; and pubic hairs.

5                 The following evidence was submitted on 2-2-87  
6 by Forensic Chemist Joyce Gilchrist. These items were  
7 obtained from Myrle Blunt: One vial of blood; saliva sample.

8                 The following evidence was submitted on 2-4-87  
9 by Forensic Chemist Joyce Gilchrist. These items were  
10 obtained from a Mengesha Tamrat: One vial of blood; saliva  
11 sample; scalp hairs; and pubic hairs.

12                 Also, one vial of blood from Johnny Cook, and  
13 one vial of blood from Melvin Nickelberry.

14                 The following evidence was submitted on 2-6-87  
15 by Forensic Chemist Joyce Gilchrist. These items were  
16 obtained from Leslie Filson: One vial of blood; saliva  
17 sample; scalp hairs.

18                 Also one vial of blood from Terry Barkus; one  
19 vial of blood from J. C. Jones.

20                 And these items were obtained from Michael J.  
21 Adams: one vial of blood; saliva sample; scalp hairs; and  
22 pubic hairs.

23                 The following evidence was submitted on 2-9-87  
24 by Detective Jerry Flowers. These items were obtained from a  
25 Lynn Amous: Scalp hairs from top of head; scalp hairs from

1 left side of head; scalp hairs from right side of head; pubic  
2 hairs; and one vial of blood.

3                 These items were obtained from Lawrence  
4 Forbes: One small tube of blood; saliva samples; scalp hairs  
5 from top of head; scalp hairs from back of head; scalp hairs  
6 from the left side of the head; scalp hairs from right side  
7 of the head; pubic hairs; right leg hairs; left leg hairs.

8                 The following evidence was submitted on 2-12-87  
9 by Forensic Chemist Joyce Gilchrist: One vial of blood from  
10 Ira Moore, Jr.; one vial of blood from David Burch, Jr.; and  
11 one vial of blood from Joe E. Dawson, Jr.

12                 The following evidence was submitted on 2-20-87  
13 by Detective Jerry Flowers and Forensic Chemist Janice  
14 Davis. These items were obtained from Darrell Taylor: One  
15 vial of blood; saliva sample; scalp hair from top of head;  
16 scalp from left side of head; scalp hair from right side of  
17 head; pubic hairs.

18                 The following evidence was submitted on 2-23 by  
19 Detectives Bill Citty and Jerry Flowers and Forensic Chemist  
20 Joyce Gilchrist. These items were obtained from Robert Lee  
21 Miller, Jr.: One vial of blood; saliva sample; facial hairs;  
22 scalp hair; scalp hair combing; pubic hairs; left leg hairs;  
23 and right leg hairs.

24                 The following evidence was submitted on 2-24-87  
25 by Detective Jerry Flowers and Forensic Chemist Janice Davis.

1 Again these items were obtained from Robert Lee Miller, Jr.:  
2 Scalp hairs; facial hairs; pubic hairs; and thigh hairs.

3                 The following evidence was submitted on 2-24-87  
4 by Detective Randy Scott. These items were obtained from  
5 three dogs located at 911 Northwest 32nd Street, Oklahoma  
6 City: Hairs taken from a seven-month old rottweiler named  
7 Dumpling; hairs taken from a ten-month old  
8 rottweiler/airedale named Little Bit; and hairs taken from a  
9 three-month old rottweiler named Bear.

10               The following evidence was submitted on 2-24-87  
11 by Detective Jerry Flowers and Forensic Chemist Janice  
12 Davis. These items were obtained from a Clem Jeffries: One  
13 vial of blood; saliva samples; scalp hairs; facial hairs; and  
14 pubic hairs.

15               The following evidence was submitted on 2-25-87  
16 by Detective Randy Scott. These items were obtained from 802  
17 Northwest 25th Street, Apartment B, Oklahoma City: One black  
18 leather holster with one valor knife; and one blue coat.

19               The following evidence was submitted on 2-26-87  
20 by Detective Bill Citty. These items were obtained from  
21 Robert Lee Miller, Jr.: One black ball cap; one black and  
22 white knitted cap; one pair of jockey shorts; one long-  
23 sleeved shirt; one pair of blue jeans; one hooded jacket; one  
24 leather belt; one pair of cloth gloves; one folding knife  
25 with white handle.

1                   The following evidence was submitted on 2-27-87  
2 by Forensic Chemist Joyce Gilchrist. These items were  
3 obtained from a Walter D. Stephens: One vial of blood; one  
4 saliva sample; scalp hairs; facial hairs; pubic hairs; and  
5 leg hairs.

6                   The following evidence was submitted on 2-18-88  
7 by Forensic Chemist Joyce Gilchrist. These items were  
8 obtained from Robert Lee Miller, Jr.: Fingernail clippings  
9 from left hand; fingernail clippings from right hand; toenail  
10 clippings from left foot; toenail clippings from right foot.

11 Q                Okay. Does that include the list of all the evidence  
12 you received in your capacity as a forensic chemist for the  
13 Oklahoma City Police Department in reference to Zelma Cutler  
14 homicide case?

15 A               It does.

16 Q                Did you perform any forensic tests, either serological  
17 or hair comparisons, on any or all of these items?

18 A               I did.

19                   MR. ELLIOTT: May I approach the witness, Your  
20 Honor?

21                   THE COURT: Yes.

22 Q                (By Mr. Elliott) I'll now hand you what's marked for  
23 identification purposes as State's Exhibit Number 85 and ask  
24 you to look at it, please. Can you tell me what 85 is?

25 A               85, State's Exhibit 85 is an evidence envelope

1 containing trace evidence that was obtained from 1142  
2 Northwest 31st Street.

3 Q Okay. How do you recognize State's 85?

4 A Because it has my initials on it and my case number  
5 and my laboratory item number.

6 Q Okay. What condition was State's 85 when you received  
7 it?

8 A It was in a closed and sealed condition.

9 Q And I'll ask you now to open State's Exhibit 85 and  
10 examine the contents, please. Ask you to examine State's 85A  
11 through D and ask if you can recognize those, please.

12 A Okay. 85A is a bindle that contained hairs taken from  
13 the top of the bed of the victim, by the victim's neck.

14 85B are hairs taken from the bottom pillow one  
15 foot south of the victim's head.

16 85C are hairs taken from the throat area of the  
17 victim.

18 85D is a broken finger or toenail which was  
19 found on top of the bed one foot two inches south of the left  
20 leg of the victim.

21 Q And what were the conditions of State's Exhibit 85A  
22 through D when you received them?

23 A They were in a sealed and closed condition.

24 Q Were they located inside State's 85?

25 A Yes, they were.

1 Q I'll now hand you what's marked as State's Exhibit 86  
2 and ask you to examine it, please. Can you tell me what  
3 State's 86 is?

4 A Yes, I can. It's a brown paper sack containing a  
5 white knotted pillow case.

6 Q How do you recognize State's 86?

7 A Has my initials and case number and laboratory item  
8 number on the back.

9 Q Okay. And what condition was State's 86 when you  
10 received it?

11 A In a sealed, closed condition.

12 Q Now, I hand you what's marked as State's Exhibit 87.  
13 and ask if you recognize State's 87.

14 A I can.

15 Q And how do you recognize State's 87?

16 A Again, my initials, case number, and laboratory item  
17 number is on the back.

18 Q And what is State's 87?

19 A Two white pillows taken from under the victim's head.

20 Q And what condition was State's 87 when you received  
21 it?

22 A Sealed and closed condition.

23 Q I'll hand you what's marked as State's Exhibit 88. I  
24 ask you to examine it, please. Do you recognize State's 88?

25 A I do.

1 Q And how do you recognize it?

2 A Again, my initials and case number and lab item number  
3 is on the back.

4 Q Okay. What condition was State's 88 when you received  
5 it?

6 A Sealed and closed condition.

7 Q And what is State's 88?

8 A One flat white sheet.

9 Q Now, I hand you State's 89 and ask you to look at it,  
10 please. Ask if you recognize State's 89.

11 A I do.

12 Q How do you recognize it?

13 A Again, it has my initials, my case number, laboratory  
14 item numbers on it.

15 Q And what is State's 89?

16 A State's 89, exhibit, is an evidence envelope  
17 containing morgue evidence obtained from [REDACTED].

18 Q And what condition was State's 89 when you received  
19 it?

20 A In a sealed and closed condition.

21 Q At this time I'd ask you to open State's 89 and  
22 examine the contents, State's 89A through E.

23 A A through E?

24 Q I believe that's correct.

25 A I have A through F here.

1 Q I'm sorry. You're correct. A through F.

2 A Okay. 89A is an empty vial that at one time contained  
3 a liquid blood sample obtained from [REDACTED] and also a  
4 dried stain that I made of her blood sample myself in the  
5 laboratory.

6 89B, the evidence envelope that at one time  
7 contained four vaginal fornix swabs from [REDACTED].

8 89C is an envelope that at one time contained  
9 two vaginal cervix swabs from [REDACTED].

10 89D is an envelope that at one time contained  
11 two rectal swabs obtained from [REDACTED].

12 89E, an envelope that contained fingernail  
13 clippings from the left hand of [REDACTED].

14 And 89F, an envelope that contained the  
15 fingernail clippings from the right hand of [REDACTED].

16 Q Again, how do you recognize State's 89A through F?

17 A Again, my initials and my laboratory item and case  
18 number on each item.

19 Q What were the conditions of Items 89A through F when  
20 you received them?

21 A In a sealed and closed condition.

22 Q And were they contained in State's 89?

23 A Pardon me?

24 Q And were they contained in State's 89?

25 A They were.

1 Q I'll hand you what's marked as State's Exhibit 90 and  
2 ask you to examine it, please. Can you tell me what that is?

3 A Yes, I can.

4 Q And what is it?

5 A It's a nightgown taken from the body of [REDACTED].

6 Q And how do you recognize it?

7 A Again, it has my initials, the case number, and item  
8 number on it.

9 Q And what condition was it when you received it?

10 A Sealed and closed condition.

11 Q I now hand you State's Exhibit 91 and ask you to  
12 examine it. Can you tell me what that is?

13 A I can.

14 Q And what is it?

15 A It's one flat top sheet from Amcare.

16 Q And how do you recognize it?

17 A Again, my name, my initials, and item number is on the  
18 back.

19 Q And what condition was State's 91 when you received  
20 it?

21 A Sealed and closed condition.

22 Q I hand you State's Exhibit 92 and ask if you can  
23 examine that and tell us what it is.

24 A I can.

25 Q What is it?

1 A It's a body sheet from Amcare that was used to  
2 transport the body of [REDACTED].

3 Q And what condition was it when you received it?

4 A Sealed and closed condition.

5 Q And how do you recognize that?

6 A Again, my initials, case number, laboratory item  
7 number are on the back.

8 Q I'll hand you what's marked as State's Exhibits 93 and  
9 94 and ask you to examine those, please. Can you tell me  
10 what those are?

11 A I can.

12 93 are hairs taken from Robert Lee Miller.

13 Q And how do you recognize?

14 A Again, my initials, my case number, and laboratory  
15 item number on them.

16 Q Okay. Referring to State's 94.

17 A 94 are -- is a scalp hair combing obtained from Robert  
18 Lee Miller.

19 Q And how do you recognize it?

20 A My initials, case number, laboratory item number.

21 Q And what were the conditions of State's 93, 94 when  
22 you received them?

23 A They had been opened previously by Janice Davis, but  
24 she had stapled them.

25 Q I hand you what's marked as State's 95 and 96 and

1 ask you to examine those, please. Can you tell me what those  
2 are?

3 A Yes, I can.

4 Q What are those?

5 A 95 is a reference scalp hair sample taken from Robert  
6 Lee Miller.

7 96 are reference dog hairs taken from a  
8 rottweiler named Bear.

9 Q How do you recognize State's 95?

10 A 95 has my initials, case number, and laboratory item  
11 number.

12 Q And what condition was State's 95 when you received  
13 it?

14 A Again, it had been previously opened by Janice Davis,  
15 but she had stapled it.

16 Q Okay. How do you recognize State's 96?

17 A Again, my initials and laboratory number and item  
18 number.

19 Q And what condition was State's 96 when you received  
20 it?

21 A It was in a sealed and closed condition.

22 Q I now hand you State's Exhibit 97 and ask you to  
23 examine it, please. Can you tell me what it is?

24 A I can.

25 State's Exhibit 97 contains two items: One

1 black ball cap and one black and white knitted cap obtained  
2 from Robert Lee Miller.

3 Q How do you recognize that?

4 A Again, my initials, case number, laboratory item  
5 number is on the back.

6 Q And what condition was it when you received it?

7 A Sealed and closed condition.

8 Q I hand you what's marked as State's Exhibits 98, 99,  
9 and 100, and ask you to look at those, please. Can you tell  
10 me what those are?

11 A I can.

12 Q And what are those?

13 A 98 are fingernail clippings taken from the left hand  
14 of Robert Lee Miller.

15 99 are fingernail clippings taken from the  
16 right hand of Robert Lee Miller.

17 And State's Exhibit 100 is a dried stain of  
18 liquid blood of Robert Lee Miller that I made in my  
19 laboratory.

20 Q And how do you recognize State's 98, 99, and 100?

21 A Again, they both -- all bear my initials and my case  
22 number and laboratory item numbers on them.

23 Q In reference to State's Exhibits 98 and 99, do you  
24 have knowledge as to who recovered those fingernail  
25 clippings?

1 A I did myself.

2 Q From whom?

3 A Robert Lee Miller.

4 Q And do you see him in the courtroom today?

5 A I do.

6 Q Would you point him out and tell us where he's seated?

7 A The black man seated at the table in the multi-colored  
8 shirt.

9 MR. ELLIOTT: May the record reflect she's  
10 identified the defendant?

11 THE COURT: Yes.

12 Q (By Mr. Elliott) The fingernail clipping exhibit  
13 there that are contained in State's 98 and 99 that were  
14 recovered from the defendant, was that done pursuant to a  
15 court order?

16 A It was.

17 Q And where did you do that?

18 A In the Oklahoma County Jail.

19 Q In this building?

20 A In this building.

21 Q Now, in reference to State's 100, you said something  
22 about a bloodstain that you prepared. Can you explain that  
23 just briefly?

24 A Well, it's routine procedure in our laboratory to make  
25 a dried stain and also to freeze a small aliquot of every

1 liquid blood that comes into our laboratory, we keep in our  
2 freezer. And this is a routine procedure. So, in case we  
3 need to go back to re-examine something, we'll have something  
4 to use.

5 Q And what condition did you -- or strike that.

6 What did you do with the fingernail clippings  
7 that you removed from Robert Lee Miller, Jr., after you  
8 removed them in the Oklahoma County Jail?

9 A I took them to our laboratory and submitted them to  
10 our lab.

11 Q In?

12 A In a sealed and closed condition.

13 Q Okay. And did you perform analyses, tests, and form  
14 conclusions on each of the items that I just had you  
15 identify?

16 A With the exceptions of Item Numbers 98 and 99, yes, I  
17 did.

18 Q And to your knowledge what was done, if anything, to  
19 98 and 99? What did you do?

20 A I sent them to a Dr. I. C. Stone in Dallas.

21 MR. ELLIOTT: Judge, at this time I would move  
22 to introduce -- and bear with me because some of these have  
23 already been introduced. I move to introduce State's Exhibit  
24 96, which may have already been introduced yesterday  
25 afternoon, I believe.

1                   THE COURT: I think it was, but all right.

2                   It's admitted.

3                   MR. ELLIOTT: Show that 85 and 85A through D  
4 have previously been admitted.

5                   THE COURT: Perhaps they were not. They are  
6 admitted.

7                   MR. ELLIOTT: 86.

8                   THE COURT: What's the next one?

9                   MR. ELLIOTT: I move to admit -- well, Judge, I  
10 show 93 and 94 have been introduced and admitted too. Is  
11 that correct?

12                  THE COURT: What did you say about 86?

13                  MR. ELLIOTT: I show that 86 has already been  
14 admitted, Your Honor.

15                  THE COURT: I don't show it, but you move its  
16 admission?

17                  MR. ELLIOTT: I would move its admission at  
18 this time.

19                  THE COURT: Any objection?

20                  MR. EVANS: No, sir.

21                  THE COURT: It's admitted.

22                  MR. ELLIOTT: Same thing as with 87. I show it  
23 admitted at the same time. If not, I'll move to admit it  
24 now.

25                  THE COURT: Any objection?

1 MR. EVANS: No objections.

2 THE COURT: It's admitted.

3 MR. ELLIOTT: Same thing with 88, Your Honor.

4 MR. EVANS: Same announcement.

5 THE COURT: It's admitted.

6 MR. ELLIOTT: Same thing with 89. I show it  
7 was introduced yesterday, but if not, I'll move its admission  
8 now.

9 THE COURT: Any objection?

10 MR. EVANS: No objection.

11 THE COURT: It's admitted.

12 MR. ELLIOTT: Same with 93 and 94. I show them  
13 admitted yesterday, but if not, I move their admission now.

14 THE COURT: Any objection?

15 MR. EVANS: No, sir.

16 THE COURT: They're admitted.

17 MR. ELLIOTT: State's Exhibit 100 I would move  
18 its admission at this time.

19 MR. EVANS: No objections.

20 THE COURT: It's admitted.

21 MR. ELLIOTT: And as well as 98 and 99.

22 MR. EVANS: No objections.

23 THE COURT: They're admitted.

24 Q (By Mr. Elliott) Now, if you would, Miss Gilchrist,  
25 if you would relate to the ladies and gentlemen of the jury

1 the tests that you performed and your analyses and  
2 conclusions serologically in reference to the items that I  
3 just had you identify. If I didn't pronounce that right, I  
4 apologize.

5 A Okay. There were a number of serological exams that I  
6 did perform on the evidence submitted in this case, and I'll  
7 start out first of all with the evidence obtained from the  
8 crime scene.

9 I will start out with Exhibit Number 87. I had  
10 a number of stains on it. I examined it for the presence of  
11 trace hairs. Then I examined it for the presence of any  
12 stains. Standard procedure in our laboratory is to try to  
13 identify what type of stain we have. And if we can identify  
14 it as blood or semen or mixed or mixed body fluid, then I  
15 will do a test that's called a secretor typing test.

16 THE COURT: What is 87 for the benefit of the  
17 jury?

18 THE WITNESS: Item Number 87 are two white  
19 pillows found under the victim's head.

20 THE COURT: Okay.

21 A Okay. A secretor typing test is a test that will  
22 allow me to identify, hope to identify the blood type of the  
23 semen donor in this case, or in any case, if that semen donor  
24 is a secretor. Now, from these stains that I have a reaction  
25 to as far as the seminal acid phosphatase test goes --

1                   THE COURT: Could you push the microphone a  
2 little bit away from you?

3                   THE WITNESS: Okay.

4                   THE COURT: You're too close.

5                   All right.

6                  A Seminal acid phosphatase, the AP test, is a screening  
7 test only indicative of seminal fluid. That was one of the  
8 first tests I did on the stains, to try to identify what they  
9 were. If I get a -- it's a color reaction test. And if I  
10 get a color change, then I will go ahead and make a cutting,  
11 make an extract using distilled water. Take a small amount  
12 of that extract, place it on a slide, let it air dry, heat  
13 fixed stain, and look for sperm microscopically under a  
14 thousand power oil immersion. If I identify semen in that  
15 particular fashion, then I will go on to do the secretor  
16 typing test, which will give me the blood type of the semen  
17 donor if that person is a secretor.

18                 Secretors are classified as people whose blood  
19 type can be detected in their other body fluids, be their  
20 saliva or vaginal fluids, seminal stains, seminal fluid,  
21 tears, and sometimes nasal mucous. About 80 percent of the  
22 general population are classified as secretors, and 20  
23 percent of the population are classified as those people  
24 whose blood types cannot be detected in appreciable  
25 quantities using this particular type of assay.

1                   After I've identified whether or not the semen  
2 donor is a secretor or not, then I can also tell what his  
3 blood type is from that same test. Then I will go ahead and  
4 do a test that we call the electrophoresis. That is an assay  
5 in our laboratory that requires the use of electricity  
6 applied to a glass plate that has a thin layer of agarose on  
7 it.

8         65           THE COURT: Could you just slow down just a wee  
9 bit?

10                THE WITNESS: Okay.

11         A           It's likened to a thin layer of jello. It's about that  
12 consistency. Maybe a little sturdier.

13                I smear that across the plate and have an even  
14 thickness. I make slots in that plate. I then inject my or  
15 place my stain samples inside, in that jello, and I apply  
16 certain amount of electricity to that plate for a prescribed  
17 period of time. This allows the proteins or bands from these  
18 stains to move certain distances across the plate. Now, you  
19 can't visualize this with the naked eye, so I have to add  
20 overlays of other chemicals to allow me to visualize these  
21 bands, protein bands that show up.

22               Once I've identified those then I can -- I can  
23 identify at least three different types of enzymes or genetic  
24 markers on a particular plate. And this particular run that  
25 I do, I identify Peptidase A, Esterase D, and PGM. After

1 I've identified -- if I get PGM activity, I'll do another  
2 more sophisticated electrophoresis test called subtyping, PGM-  
3 subtyping, which is going to break down the PGM from the  
4 initial run into a further degree to allow me to further  
5 individualize that particular stain so that I can ascertain  
6 as to who that -- who could have contributed that particular  
7 stain. And I did perform that analysis in this case.

8 I will also -- you can also do the same thing  
9 to -- the same type of assay -- I mean, test to blood and/or  
10 semen or vaginal secretions. That was done on the evidence  
11 in this case.

12 So, I can identify genetic markers, blood type,  
13 secretor status as far as the individual is concerned in this  
14 case.

15 Q (By Mr. Elliott) Okay. Based on those tests that  
16 you've just described to the jury, did you arrive at  
17 conclusions concerning evidence you received in this case  
18 which you just identified?

19 A I did.

20 Q Okay. Now, I think I got a step ahead of myself.

21 Now, would you relate those conclusions as they  
22 relate to each individual item in this case?

23 A Okay. I will start again with Item Number 87, Exhibit  
24 Number 87, the two white pillows found under the victim's  
25 head. One of the pillows had a number of semen stains and

1 bloodstains on them that I had to cut out to examine.

2 Item 87, I'll call "A," was one pillow. I  
3 identified three different stains -- isolated three different  
4 stains on that pillow. There was a bloodstain. I identified  
5 it as human blood, and I also detected the "H" antigen,  
6 indicative type "O" blood.

7 Now, on the ABO level there are four different  
8 blood types. Okay. There's type "A," type "B," type "O,"  
9 and type "AB." If a person has type "A" blood, I would  
10 expect to identify the "A" in "H" antigens. But you don't  
11 always get the "H" antigen. Same thing with type "B." I'd  
12 expect to find "B" in "H," but not necessary always the "H."  
13 Type "O" blood you can only identify the "H" antigen. In  
14 type "AB" blood identify all three, "AB" and "H."

15 In this instance I identified the "H," which is  
16 indicative type "O" blood. This blood type is consistent  
17 with the blood type of [REDACTED] who in fact is type "O."

18 On the other two stains, I was not able to  
19 identify any semen on them. It wasn't blood and it was not  
20 semen. So, I don't know what they were.

21 On Exhibit 87B I isolated a total of ten  
22 stained areas on that pillow. First of all, I identified  
23 semen on all but two of those stains. I identified the ABO  
24 blood group secretor substance "A." On five of those stains  
25 I identified the "A" and "H" blood group secretor

1 substances. On three of those stains I identified the ABO  
2 blood group substance "H" on one of those stains.

3 I also attempted, as I said, to do  
4 electrophoresis on these stained areas. I was able to  
5 identify several markers. On one of my Q's I identified PEPA  
6 (1), ESD (1), and PGM (1). And I subtyped and identified  
7 subtype (1+). These markers are consistent with the markers  
8 of the victim. However, that semen could not have come from  
9 her. So, that semen is foreign to her, and that "A" antigen  
10 is foreign to her also. So, the semen information I'm  
11 picking up is coming from the semen donor.

12 I must also interject that this Q2 was also  
13 bloodstain -- mixed with blood.

14 Q When you say "Q1" and "2," what are you talking about?

15 A Those areas on the --

16 If I could show you?

17 MR. ELLIOTT: May I approach the witness,  
18 Judge?

19 THE COURT: Yes.

20 Q (By Mr. Elliott) I'll hand you State's 87.

21 A Now, this is one of the pillows that was found  
22 underneath the victim's head. And the blue marks and red  
23 marks are marks -- are circles made by myself. I put numbers  
24 by them, and I also have some indication of whether or not my  
25 AP test was positive or negative. That gave me an

1 indication that these stains had semen mixed in with them or  
2 maybe they were just plain bloodstain. I circled the items,  
3 I cut out the stained areas to allow me to perform my  
4 analyses. And I identified which stain this area came from  
5 by subscribing numbers to them. I call them Q1 out through  
6 Q10, and there may be even Q11 I did subsequently, but that  
7 was a bloodstain, I believe, or nothing. I couldn't identify  
8 anything on that. So, these Q's are what I'm talking about,  
9 these circled areas (indicating).

10 Q Okay. So that I understand and the jury understands,  
11 you take the entire pillow that has the stain on it, both the  
12 front and the back, and then you circle certain areas. You  
13 make the Magic Marker marks or the blue ink marks.

14 A That's correct.

15 Q And then you cut, actually cut out the spot, and those  
16 are the areas that you test. You don't lay the pillow itself  
17 underneath the microscope or anything.

18 A That's correct. I just test the areas that I cut out.

19 Q Okay. You refer to them as "Q1," "Q2," and so forth  
20 so that when you say "Q2," you're referring to your question  
21 or your cubed spot that you actually cut out of the pillow.

22 A That's correct.

23 Q Okay. I believe I interrupted you when you were  
24 telling your actual analysis of the pillows themselves.

25 A Okay. Q2, I identified semen, ABO type "A" blood,

1 which tells me that the semen donor is a type "A" secretor in  
2 this case. However, because there's blood mixed in with the  
3 seminal stain, the activity I'm picking up, the information  
4 I'm picking up is all coming from the victim. The PGM  
5 activity is 50 times higher in blood than it is in seminal  
6 fluids. So, I've got a mixed body fluid. I'm getting a  
7 masking effect where it's hiding or covering up the  
8 information that could have come from the semen donor or the  
9 semen in this instance.

10 Q And when you're saying "mixed body fluid," do you mean  
11 could the blood and semen mix or --

12 A I've got blood and semen mixed together.

13 Q Two different type fluids that have been secreted from  
14 somebody that are mixed together.

15 A That's correct.

16 Q All right. Go ahead.

17 A My Q3 I did not identify spermatozoa. I got a  
18 positive reaction from my acid phosphatase, which indicated  
19 seminal fluid, but -- and I identified the "A" blood group  
20 substance, but there were no sperm -- seminal fluid but no  
21 sperm cells --

22 THIS REPORTER: Pardon me?

23 A Seminal fluid present probably but no sperm cells were  
24 identified.

25 THE COURT: Please slow down just one little

1       bit.

2                     THE WITNESS: Yes, sir, Your Honor.

3   Q       (By Mr. Elliott) For the jury tell us the difference  
4       between seminal fluid and sperm cells.

5   A       Well, there are -- seminal fluid is a carrier agent  
6       for the sperm cell that's found in semen. Semen is a very  
7       complexed mixed -- body fluid mixture. And semen -- or sperm  
8       cells and seminal fluids are only two of the things that we  
9       identify in our laboratory, we look for to identify semen.  
10      It's a very complexed mixture. There are other things in  
11      seminal fluid as well.

12   Q       To simplify it, and I don't want to oversimplify it --  
13      so, if I do, correct me -- the seminal fluid is the fluid  
14      that we carry the sperm cells up to allow them to be  
15      deposited, and then the fluid perhaps might run away but the  
16      sperm cells would still be there.

17   A       Very possible, yes.

18   Q       Okay. Go ahead.

19   A       Okay. Q3, identified PEPA (1), no ESD, and PGM (1),  
20      and subtyping was ultranegative. That could indicate that  
21      the information again I'm picking up could be coming from the  
22      semen donor because I don't have ESD. ESD is not found in  
23      sperm cells or semen.

24                     On Q4, identified semen, type "A" blood group  
25      substance, and PGM (1). Subtyping results were negative,

1 again indicating that the information I'm picking up possibly  
2 could be coming from the semen donor.

3 Q5, identified semen, the blood group  
4 substances "A+H," PEPA (1), ESD (1), PGM (1), and PGM-subtype  
5 (1+). This indicates to me again a mixture. Information as  
6 far as electrophoresis goes is coming from the victim mainly  
7 because I'm identifying the ESD.

8 On Q6, identified semen, blood group substances  
9 "A" and "H," PEPA (1), no ESD, PGM (1). Subtyping results  
10 were negative.

11 On my Q7, I don't identify sperm. I get a  
12 positive reaction on my AP screening test. Identify the "H"  
13 blood group substance and only PGM (1). Indicates that this  
14 information is coming from the victim.

15 Q Now, let me interrupt you there. You've lost me. I  
16 don't understand you.

17 I thought you said earlier the seminal fluid  
18 was foreign to the victim.

19 A It is. I said my AP spot reaction was positive.  
20 That's just a screening assay. It's not a positive test for  
21 seminal fluid.

22 Q Okay. So, when you're saying here at the end you're  
23 getting reactions -- you think you're getting these reactions  
24 from the victim, you're not indicating whether the seminal  
25 fluid or the sperm came from the victim.

1 A No, I'm not.

2 The vaginal secretions does also contain levels  
3 of acid phosphatase. The reaction I got was not a level  
4 conducive or indicative of seminal acid phosphatase levels.  
5 It was a weak reaction. But I got the reaction, so I  
6 recorded my results.

7 Q Okay.

8 A Okay?

9 I identified the secretor blood group substance  
10 "A," indicative of type "O" person, was consistent with that  
11 of the victim, and PGM (1).

12 On Q7, identified semen, the blood group  
13 substances "A" and "H." And I did no further test on that  
14 sample.

15 On Q9, identified semen, the blood group  
16 substance "A." The only test I attempted to do on that was  
17 subtyping. My results were negative.

18 On Q10, identified semen. And I attempted to  
19 do subtying; however, my results were negative.

20 And then I'll go to --

21 Q Okay. So, let me stop you there and see if I  
22 understand you.

23 You identified -- well, how would you  
24 characterize the amount of semen that you identified on  
25 State's 87, the pillows? Or can you as far as amount?

1 Small, large, medium? Or can you? As far as quantity.

2 A Well, I'm not sure that I can say amount. There were  
3 a number of -- I thought an unusually large number of semen  
4 stains, but I have mixed body fluids, a mixture there. It  
5 would indicate that there could be. Yeah, I could say that  
6 there was probably a lot -- well, more than one ejaculate  
7 would indicate to me.

8 Q Okay. And I believe you indicated that the semen that  
9 you found present on the pillows, the pillows that were  
10 underneath the victim's head, you determined that the semen  
11 donor was an "A" secretor?

12 A That's correct.

13 Q Okay. Go ahead.

14 A Okay. I go to State's Exhibit Number 88. It's a flat  
15 white sheet. And that was a sheet taken from the bed of the  
16 victim.

17 I isolated nine different stained areas, and I  
18 also identified urine stains on the sheet. The tests that I  
19 performed on the sheet are the same type of tests that I  
20 performed on the pillow.

21 I'll start out with my Q1. I did not identify  
22 semen. I could not detect any secretor blood group  
23 substances. Identified PEPA (1) and PGM (1). ESD results  
24 and PGM-subtyping results were negative.

25 Q2 was a massive bloodstain. It had numerous

1 semen stains surrounding the bloodstains in that. I  
2 identified semen, type ABO blood group substance "A," and --  
3 let me look at my results here -- PGM (1), I believe -- let  
4 me be sure -- PEPA (1), ESD (1), PGM (1), and PGM-subtype  
5 (1+).

6 On Q3, identified semen, ABO type "A" blood  
7 group substance.

8 Q Now, explain what you mean by that. When you say "ABO  
9 blood type substance," are you saying the semen donor is "A"  
10 blood type?

11 A He's a secretor. Yes, an "A" secretor.

12 Okay. On Q3 I got no results on my PGM-  
13 subtyping. I did not attempt a conventional method on Q3  
14 because of its limited quantity.

15 On Q4, identified semen, the ABO blood group  
16 substance "A." Identified only PGM (1). My results for  
17 subtyping were negative.

18 On Q5, identified semen, the ABO secretor blood  
19 group substance "A." And I did not do any further testing  
20 because of the limited size.

21 On Q6, identified semen and type "A" blood  
22 group substance. And no further tests were done.

23 Q7, identified semen, the ABO blood group  
24 substance "A," PGM -- PEPA (1), ESD (1), PGM (1). Subtyping  
25 results were negative.

1                   On Q8, identified semen. Could not detect any  
2 secretor blood group substances. And there was not enough  
3 sample to do any further testing.

4                   On Q9 I did not identify any semen present.  
5 PGM-subtyping results were negative.

6                   The next item that I analyzed --

7 Q                Okay. Let me interrupt you at that point.

8                   In summary then, as to reference to State's  
9 Exhibit 88, which is the flat sheet, that was from underneath  
10 the victim, I believe.

11 A               That's correct.

12 Q                You again took nine separate little cutouts of the  
13 sheet as you did on the pillows.

14 A               Yes, I did.

15 Q                And of those nine sheets (sic), you identified sperm  
16 on seven of the areas; right?

17 A               Yes; correct.

18 Q                And of those seven you identified the semen donor  
19 again as an "A" secretor on six of those seven.

20 A               That's correct.

21 Q               Okay.

22 A               The next item would be State's Exhibit Number 90,  
23 which is the nightgown taken from the victim. I identified  
24 four different stain areas on the nightgown, Q1 through Q4.

25                   My Q1, identified semen. My secretor typing

1 results were inconclusive. And I did not get any results  
2 from the -- on electrophoresis.

3 On Q2, identified semen, the ABO secretor blood  
4 group substance "A." Subtyping results were negative.

5 On Q3, identified semen. Again, the secretor  
6 typing results were inconclusive. No secretor blood group --  
7 well, no electrophoresis were conducted on that sample.

8 Q4, identified semen, ESD (1), and PGM (1), and  
9 I also identified the ABO blood group antigen "H," which is  
10 indicative of type "O" blood.

11 Q Okay. So, in summary there, you took four little  
12 cuttings out of the victim's nightgown, as you did on the  
13 pillow.

14 A That's correct.

15 Q And of those four questioned areas or cuttings, you  
16 found positive for sperm in all four of those.

17 A Correct.

18 Q And of those four you were able to determine if the  
19 semen donor was "A" on one of the four and it was  
20 inconclusive as to the other three.

21 A It was inconclusive as to two of them. On two of  
22 them, I attempted to -- because of the size of Q4 I wanted to  
23 also preserve as much of that as I could. I wanted to  
24 identify -- because of the location of Q4, I wanted to  
25 identify what blood type that was. And that's why I

1 performed that particular test.

2 Q Okay. Proceed on.

3 A On State's Exhibit Number 89A, it's the blood sample  
4 obtained from [REDACTED]. I determined that she's a type  
5 "O" secretor and that her genetic markers are as follows:  
6 PEPA (1), ESD (1), and PGM (1). And she subtypes PGM (1+).

7 On 89B are two vaginal fornix swabs.

8 Identified semen, the ABO secretor blood group substance "A,"  
9 PEPA (1), ESD (1), PGM (1), and subtype (1+).

10 On 89C, cervical swabs, I identified semen.

11 Could not detect secretor typing results. Could detect blood  
12 group substances, I should say. PEPA (1), ESD (1), PGM (1),  
13 and subtyping results were negative.

14 On 89D, which are the rectal swabs, I  
15 identified semen. No secretor blood group substances  
16 detected. Identified PEPA (1), ESD (1), and PGM (1).

17 Q Okay. So, in summary there you determined from the  
18 vaginal swabs, both the fornix and the cervix, tested  
19 positive for sperm.

20 A Yes.

21 Q Which is foreign to Mrs. [REDACTED].

22 A That's correct.

23 Q And as to the fornix swab, you identified as the semen  
24 donor was blood type "A."

25 A That's correct.

1 Q Then as to the rectal swabs, again you found positive  
2 for sperm.

3 A Yes.

4 Q Which again would also be foreign to Mrs. [REDACTED] there  
5 as well.

6 A That's correct.

7 Okay. On State's Exhibit Number 100, the dried  
8 stain of the liquid blood sample of Robert Lee Miller, and  
9 also I believe State's Exhibit Number 49, which is the liquid  
10 sample of blood from Robert Lee Miller, I determined that  
11 he's an ABO type "A" person. He is a secretor. And his  
12 genetic markers are as follows: He's a PEPA (1), ESD (2-1),  
13 a PGM (1). He's a PGM-subtype (1-).

14 Q Again, when you say -- determined that he was an ABO  
15 blood type group "A," you're saying he's "A" blood.

16 A Type "A" blood, yes.

17 Q All right. "A" secretor to be more exact.

18 A He's an "A" secretor, yes.

19 Q All right.

20 A I also performed ABO blood typing grouping results on  
21 all of the liquid blood samples that were submitted to our  
22 laboratory in reference to all of the other people that I  
23 named earlier. I also conducted electrophoresis on those  
24 samples.

25 On Ra-Heru Khepra, also known as Roderick

1 Wilson, I identified type "A" blood, ESD (1), PEPA (1), PGM  
2 (1), and he subtypes (1+).

3 On Jesse McDonald, type "A" blood, PEPA (1),  
4 ESD (1), PGM (1). He subtypes (1+1-).

5 Q Let me back up to the Roderick Wilson. You determined  
6 he was an "A" secretor or a nonsecretor?

7 A "A" secretor.

8 Q Okay. And as to Jesse McDonald, Jr., an "A" secretor  
9 or a nonsecretor?

10 A McDonald's blood type was not tested for that.

11 Q Okay.

12 A Ernest McDonald, type "A" blood, PEPA (1), ESD (2-1),  
13 PGM (1). He subtypes (1+1-). He is a secretor.

14 Myrtle Blunt, type "O" blood, PEPA (2-1), ESD  
15 (1), PGM (1). Subtypes PGM (1+). His secretor status is  
16 unknown.

17 Mengesha Tamrat is a type "A" blood, PEPA (1),  
18 ESD (2), PGM (1). He subtypes (1+1-). Lewis results were  
19 a-neg/b-neg.

20 Johnny Cook, type "O" blood, PEPA (1), ESD (1),  
21 PGM (2-1). He subtypes a (2-1-), and he is a secretor.

22 Melvin Nickelberry is type "O" blood, PEPA (1),  
23 ESD (1), PGM (1). He subtypes (1-). He is classified as a  
24 nonsecretor.

25 Leslie Filson is type "A" blood, PEPA (1), ESD

1 (1), PGM (1). He subtypes (1+). He is a secretor.

2 Terry Barkus is type "O" blood, PEPA (1), ESD  
3 (1), PGM (1). He subtypes (1+1-). He is a secretor.

4 J. C. Jones, type "O" blood, PEPA (2-1), ESD  
5 (2-1), PGM (2-1). He subtypes (2+1+), and he is a secretor.

6 Michael Adams, type "A" blood, PEPA (1), ESD  
7 (2-1), PGM (2-1), subtypes (2-1+). He is a secretor.

8 Lynn Amous, type "A" blood, PEPA (2-1), ESD  
9 (2-1), and PGM (1). He subtypes a (1+). He is a secretor.

10 Lawrence Forbes, type "O" blood, PEPA (1), ESD  
11 (1), PGM (1), subtypes (1+1-). His blood was not checked for  
12 the Lewis factor.

13 Ira Moore was type "A" blood, PEPA (1), ESD  
14 (1), PGM (1). He subtypes (1+1-). Secretor status is  
15 unknown.

16 David Burch, type "A" blood, PEPA (1), ESD (1),  
17 PGM (1), subtypes (1+1-). He is a nonsecretor.

18 Joe Dawson, type "A" blood, PEPA (1), ESD  
19 (2-1), PGM (1). He subtypes (1+). He is a secretor.

20 Darrell Taylor, type "A" blood, PEPA (1), ESD  
21 (1), PGM (1), subtypes (1+1-). His secretor status is  
22 unknown.

23 Clem Jeffries has type "A" blood. He's a PEPA  
24 (1), ESD (1), and PGM (1). Subtypes (1+). He's a  
25 nonscretor.

1                   Walter Stephens is type "A" blood, PEPA (2-1),  
2 ESD (1), PGM (1). He subtypes (1+1-). His secretor status  
3 is unknown.

4                   I was also asked to examine blood obtained from  
5 a Detrick White. He has type "A" blood. He's a PEPA (2-1),  
6 ESD (1), PGM (1). He subtypes a (1+1-). The Lewis test was  
7 not done on his blood.

8                   Matthew Triplet is type "A" blood. He's PEPA  
9 (1), ESD (2-1), PGM (2-1), subtypes (2+1+). Lewis test not  
10 done.

11                  And that was it for the blood typing tests.

12 Q                Okay. Did you also do hair comparisons and analyses  
13 in this case in your capacity as forensic chemist for the  
14 Oklahoma City Police Department in items that you've just  
15 identified?

16 A                I did.

17 Q                Could you first of all briefly explain the procedures  
18 you go through in hair comparison analysis prior to any  
19 conclusions?

20 A                Okay. First of all, the hairs are removed from items,  
21 garments, or clothing, or whatever. They are placed on clean  
22 microscope slides and held in place with the glue we call  
23 Fermennt and cover slips place -- applied to it. Makes a  
24 semi-permanent mount. That's allowed to dry so -- at least  
25 24 hours before we begin our examination.

1                 The examination is done using a transmitted  
2 light microscope, a comparison microscope. A comparison  
3 microscope is simply two microscopes held together by a  
4 common bridge, two separate stages, that will allow us to  
5 examine, look at two samples at the same time. I can control  
6 my field of view. I can split the screen to look at two  
7 slides at the same time side by side, or I can look at one  
8 side by maintaining -- occupying a whole field of view  
9 microscope, binocular microscope.

10                Hair comparisons are conducted at 400 power, so  
11 that you can see all the characteristics inside.

12                One of the things about hair comparisons is  
13 that on fibers you have to first of all identify -- determine  
14 whether or not what you're looking at is a fiber or a hair.  
15 Unless you've made that distinction, then you need to go on  
16 to determine whether or not that hair is human or animal.  
17 And after I've made that determination, I begin to -- I can  
18 classify that hair as being -- as far as a race goes, whether  
19 or not that hair came from a Caucasian, Negroid, or Mongoloid  
20 person.

21                I can also tell body origin, that hair came  
22 from the scalp, if it came from the pubic area, or other  
23 parts of the body. I can tell how that hair was removed, if  
24 it fell out naturally or if it was forcibly removed. I can  
25 tell if that hair has been chemically treated, like being

1 dyed or bleached. I can also tell how -- if that hair has  
2 been -- if it has ever been cut, what type of instrument was  
3 more -- most probably used to cut that hair.

4 The characteristics that we look at -- look for  
5 in hair comparison can number anywhere from seven or eight to  
6 as many as 25, depending on the type of hair you're looking  
7 at.

8 I compare scalp hairs to scalp hairs, pubic  
9 hairs to pubic hairs. We don't cross -- we don't compare  
10 pubic hairs to scalp hairs.

11 In a human hair, if I can back up a little bit,  
12 a human hair can be analogous to a regular wooden pencil.  
13 The eraser of the pencil itself could be likened to the root  
14 of a hair. Now, we like to have the entire hair so we can do  
15 our examination starting at the root end and going all the  
16 way out to the tip end of the hair. And during the course of  
17 an examination of that hair, from the root to the tip,  
18 focusing up and down, I will identify the characteristics or  
19 the variations of characteristics seen in that particular  
20 hair sample.

21 The paint of the hair (sic) can be likened to  
22 the cuticle, the coating surrounding the hair itself. The  
23 cuticle is normally colorless. If present it can range in  
24 thickness. And on the shape or condition of that cuticle  
25 depend upon hygiene environment and other factors.

1                 The wood of the pencil itself can be likened to  
2 an area we call a cortex. It's in the cortex the  
3 pigmentation or color of our hairs are found. Cortex  
4 contains quite a few characteristics that we look for when we  
5 do examinations.

6                 The central portion of the pencil, the lead  
7 portion, can be likened to an object we call the medulla or  
8 medulla, depending on your pronunciation. If present in the  
9 hair, it can be continuous or one long piece or broken up in  
10 portions of varying lengths if it is present. And it can --  
11 it can be of forensic value, information, as far as our  
12 examination goes.

13                 Those basic things are the things that I look  
14 for when I'm doing my hair comparisons. Depending on the  
15 number of hairs you have to look at, the reference hairs you  
16 have to look at, you establish a range of a person's  
17 characteristics. No hairs -- no two hairs in your head are  
18 going to be exactly alike. So, you're going to have to have  
19 a good representative sampling of hair. And I will establish  
20 a range of good characteristics. And based on my experience  
21 and training, I will determine -- make determinations as to  
22 whether or not one hair could match another hair.

23                 There are three things, three conclusions that  
24 can be made, arrived at in doing a hair comparison. First of  
25 all, that this hair is consistent with -- the reference hairs

1 are consistent with the unknown hairs and could share a  
2 common source or could have come from that particular  
3 individual.

4           Or the reference hairs are not consistent  
5 microscopically with the unknown hairs and could not have  
6 come from this same source or individual. You can positively  
7 eliminate someone on a hair comparison, but you cannot  
8 identify anyone on a hair comparison. You can only include  
9 them as being a possible donor.

10           The third thing that I can say about in my  
11 conclusions about a hair comparison is that there are either  
12 too many similarities or dissimilarities or there's too much  
13 damage or the hair fragments -- the hairs are not long  
14 enough to allow a valid conclusion to be reached as to  
15 whether or not these hairs could have come from an  
16 individual.

17           Okay. Those are the three things I can say.

18           THE COURT: When you reach a convenient place,  
19 we'll adjourn.

20           MR. ELLIOTT: This might be as convenient as  
21 any, Judge.

22           THE COURT: Members of the jury, we will take a  
23 recess until 1:30.

24           Do not discuss the case at all. Do not permit  
25 anyone to talk about it to you.

1           Is that it?

2           MR. EVANS: Yes, sir.

3           THE COURT: All right.

4           (Whereupon, the following transpired in open court,  
5           the defendant personally present with counsel,  
6           counsel for the State present, and the jury in the  
7           box:)

8           THE COURT: We'll continue.

9           MR. ELLIOTT: Thank you, Your Honor.

10          Q        (By Mr. Elliott) Okay. Miss Gilchrist, I believe we  
11         were at the point where you had just concluded explaining to  
12         the jury what analyses and what observations and what things  
13         you did in reference to hair comparisons. And I believe I  
14         asked you -- if I did not, I'll repeat it -- if you performed  
15         any of those analyses or any of those types of comparisons on  
16         items that I asked you to identify and we've introduced in  
17         evidence in this case.

18          A        I did.

19          Q        Now, if you would, again referring to State's exhibit  
20         number and description, tell us what your conclusions were in  
21         reference to any or all hair comparisons.

22          A        Okay. State's Exhibit Number 85A, which is a top of  
23         the bed, I identified five Negroid scalp hair fragments;  
24         however, those hairs were not suitable for forensic hair  
25         comparison due to the length of those hairs and the damage

1     that I observed on them also.

2     Q       Let me ask you at that point, you did determine that  
3       they were Negroid hairs.

4     A       Yes.

5     Q       And you did determine they were scalp hairs.

6     A       That's correct.

7     Q       But you were unable to compare those to any  
8       reference hairs that you had in this case.

9     A       That's correct.

10    Q       Will the fact that were unable to compare them to any  
11      specific reference hairs, does that prevent you or -- well,  
12      just prevent you from determining, one, that they're Negroid,  
13      and two, that they're scalp?

14    A       No.

15    Q       In other words, you can do that even though they're  
16      still not comparable to any certain --

17    A       That's true.

18    Q       Okay.

19    A       State's Exhibit Number 85B, which is the bottom  
20      pillow, I identified one Negroid scalp hair fragment. Now, I  
21      saw points of similarities with the reference scalp hairs of  
22      the defendant, Robert Lee Miller; however, this hair showed  
23      too much damage for me to conclude that it could have come  
24      from him. I could not include or exclude him as being the  
25      donor of that hair.

1 Q But there were -- there were some things that were  
2 similar.

3 A There were points that were similar as far as the  
4 characteristics go, but I could not reach a determination as  
5 to whether or not that hair could have come from him.

6 Q I see.

7 Okay. Proceed on.

8 A State's Exhibit 85C are hairs taken from the throat  
9 area of the victim. Identified three Negroid scalp hair  
10 fragments and one Negroid pubic hair fragment that I could  
11 not associate or make a forensic comparison due to the length  
12 and the amount of damage to those hairs. There were,  
13 however, two Negroid scalp hair fragments where no  
14 conclusions could be reached as to whether or not these hairs  
15 could have come from Miller due to the amount of damage;  
16 however, I did see, you know, points of similarities in the  
17 characteristics of that hair in comparison to his reference  
18 hairs.

19 State's Exhibit 87 is one white pillow.  
20 Identified one scalp hair that's consistent with the scalp  
21 hairs of [REDACTED].

22 I skipped one. I'm sorry.

23 State's Exhibit 86 is the knotted white pillow  
24 case. Identified one Negroid scalp hair fragment that had  
25 been too badly damaged in order to be suitable for forensic

1 comparison; however, I could tell that the hair had been  
2 forcibly removed. One Negroid limb hair fragment. Again, I  
3 didn't have any reference hairs -- limb hairs to compare it.  
4 I believe that was an arm hair fragment.

5 Q Okay.

6 A State's Exhibit 88 is a flat sheet. I identified five  
7 scalp hairs and seven pubic hairs that are consistent with  
8 [REDACTED]. I identified two Negroid scalp hair fragments  
9 that were consistent with Robert Lee Miller. However, there  
10 are six Caucasian pubic hair fragments that were not suitable  
11 for forensic comparison; four Caucasian limb hairs -- and I  
12 didn't have any Caucasian reference limb hairs to compare;  
13 eight Negroid scalp hair fragments that were not suitable for  
14 forensic comparison; one Negroid scalp hair fragment that  
15 showed points of similarity of characteristics of Miller's  
16 hair, but they were too badly damaged to allow me to conclude  
17 as to whether or not they could have come from him; four  
18 Negroid pubic hair fragments not suitable for forensic  
19 comparison; two Negroid limb hair fragments, no reference to  
20 use; and two animal hair fragments; and five fibers.

21 From State's Exhibit Number 90, which is the  
22 nightgown, I identified four scalp hairs and three pubic  
23 hairs consistent with [REDACTED]. I also identified two  
24 Negroid scalp hair fragments not suitable for forensic  
25 comparison; one Negroid facial hair fragment not suitable

1 for forensic comparison; two fibers.

2 State's Exhibit 91 is a bottom sheet from  
3 Amcare. I identified ten scalp hairs that were consistent  
4 with [REDACTED]. I also identified one Caucasian scalp  
5 hair that was not consistent with [REDACTED]; one Caucasian  
6 limb hair not consistent -- I don't have any limb hairs to  
7 compare with them; three fibers; one fiber clump; and one  
8 animal hair fragment.

9 In State's Exhibit Number 92, which is the body  
10 sheet, one flat body sheet from Amcare, identified two animal  
11 hairs taken from the bottom Amcare sheet, are microscopically  
12 consistent with the dog hairs obtained from a rottweiler  
13 named Bear and could share a common source.

14 Q Okay. In summary, if I understood you correctly, and  
15 correct me if I'm wrong, as to the hairs that were taken from  
16 the top of the bed very near the victim's neck, you  
17 identified five Negroid scalp hairs that were, as you would  
18 call them, fragments and therefore not suitable for  
19 comparison to anyone.

20 A That's correct.

21 Q In reference to State's Exhibit 85B, the bottom pillow  
22 that was taken out from underneath Mrs. [REDACTED] head, you  
23 identified again one Negroid scalp hair fragment that did  
24 have points of similarities to Robert Lee Miller but not  
25 enough to say they were consistent with.

1 A That's correct.

2 Q In reference to State's 85C, the hairs that were taken  
3 from the throat area of Mrs. [REDACTED], you found six Negroid  
4 hair fragments, five of which were scalp, one of which was  
5 pubic, and of those six, again, two of those had points of  
6 similarities to the defendant, Robert Lee Miller, but again  
7 not enough to say they're consistent with.

8 A That's correct.

9 Q In referring to State's 86, the knotted pillow case,  
10 you found one Negroid scalp hair, again, although it was not  
11 suitable enough because of the size of fragmentation to  
12 compare it to anyone.

13 A Correct.

14 Q And as to State's 87, pillow from underneath the  
15 victim's head, you did identify one scalp hair that was in  
16 fact consistent with Mrs. [REDACTED].

17 A That's correct.

18 Q As to State's 88, the flat sheet from the bed area,  
19 you found seven hairs that were consistent with Mrs. [REDACTED]  
20 five scalp -- excuse me -- twelve hairs that were consistent  
21 with Mrs. [REDACTED], five scalp and seven pubic.

22 A Yes.

23 Q And you also found two scalp hair fragments that were  
24 microscopically consistent with those coming from Robert Lee  
25 Miller.

1 A That's correct.

2 Q Also you found again one Negroid fragment along with  
3 the two that were microscopically consistent, you found one  
4 that was, again, points of similarities but not enough to go  
5 as far as saying they were microscopically consistent.

6 A That's correct.

7 Q On the flat sheet, along with those three particular  
8 hairs, you found eight Negroid scalp hair fragments. Again,  
9 Negroid scalp but not enough due to the fragmentation to  
10 determine whether that would be consistent with anyone.

11 A That's correct.

12 Q Also, four more Negroid pubic hairs. Again, able to  
13 determine that they were Negroid in nature and pubic in  
14 nature but not enough due to the fragmentation to determine  
15 they were consistent with anyone.

16 A Correct.

17 Q And also two Negroid limb hair fragments -- limb  
18 meaning arm and leg?

19 A Arm hairs is what I determined them to be.

20 Q But again you had nothing there to compare them to;  
21 correct?

22 A That's correct.

23 Q And moving to State's Exhibit 90, the nightgown in  
24 which Mrs. [REDACTED] was wearing, you identified seven hairs  
25 consistent with Mrs. [REDACTED], four from the scalp area and

1 three from the pubic area.

2 A      Correct.

3 Q      And again, you found three Negroid hairs, two from the  
4 scalp, one from the facial. Again, the fragmentation is to  
5 the point where you could not microscopically compare those  
6 to anything else.

7 A      That's correct.

8 Q      And as to State's Exhibit Number 96, you determined  
9 the dog hairs that were removed -- or the animal hairs that  
10 you determined were dog hairs; is that correct?

11 A      That's correct.

12 Q      Taken from the bottom Amcare sheet were consistent  
13 microscopically with the hairs that had been removed from a  
14 dog, rottweiler dog by the name of Bear.

15 A      That's correct.

16 Q      Now, did you do any hair comparisons in reference to  
17 these other hair samples that you had been submitted to in  
18 reference to all these other individuals that you listed  
19 earlier that you had received samples from, Roderick Wilson,  
20 Jesse McDonald, and et cetera?

21 A      I did.

22 Q      Could you tell us those results, please?

23 A      Okay. I'll read this disclaimer first.

24            All the names listed I'm about to read now, all  
25 the people were eliminated as a possible donor of the hairs

1       that were found suitable for forensic comparison: Ra-Heru  
2       Khepra, Clem Jeffries, Ronald Lott, Darrell Taylor, Jesse  
3       McDonald, Jr., Ernest McDonald, Leslie Filson, Mengesha  
4       Tamrat, Walter Stevens, Lynn Amous, and Michael Adams.

5       Q       So, if I understood you correctly, even though the  
6       hair comparisons are not -- are not positive such as a  
7       fingerprint and you can't make it one on one or you can't  
8       positively say any of these hairs come from a person to the  
9       exclusion of anyone else, you can exclude people by hair  
10      comparisons.

11      A       That's correct.

12      Q       And if I understood you correctly, the eleven names  
13      that you just read, you did exclude those people as having  
14      been the donor of the hairs found at the [REDACTED] scene; is  
15      that correct?

16      A       That is correct.

17      Q       Now, going back to your analysis of the body fluids,  
18      and again for a brief quick summary as much as from what I  
19      understand taken from my notes, in your analyses and tests  
20      ran on all of the semen stains that you found from the items  
21      recovered from the scene of the [REDACTED] homicide, did you find  
22      any semen donor other than an "A" secretor?

23      A       I did not.

24      Q       And you determined that Mrs. [REDACTED] was blood type  
25      "O."

1 A Yes.

2 Q Did you determine that Robert Lee Miller was an "A"  
3 secretor?

4 A That's correct.

5 Q And you determined that the semen donor of the semen  
6 stains that you identified was an "A" secretor.

7 A That is correct.

8 Q Now, in reference to the vaginal swabs in which you  
9 detected semen and the anal swab which you detected semen,  
10 had she been dead -- had Mrs. [REDACTED] been dead for a two- or  
11 three-day period, would that affect your ability to determine  
12 the presence of semen?

13 A It could affect it, yes, due to drainage and  
14 bacterial, you know, decomposition too.

15 Q Well, would it affect it to the degree of not being  
16 able to determine the blood type of the semen donor?

17 A Depends on how much was left. I had enough from some  
18 of the swabs to determine blood type.

19 Q Okay. So, even though it would affect the amount, you  
20 had enough in this case.

21 A That's correct.

22 Q Now, do you have an opinion based on your observations  
23 of the two pillows, State's Exhibit 87, as to the location of  
24 those pillows when the semen was deposited on them?

25 A Correction. There's only one pillow that has semen

1 stains that I identified that have semen stains on them.

2 Q Out of 87. That's correct. Okay.

3 A Now, you need to repeat your question.

4 Q Do you have an opinion as to where that pillow was  
5 located at the time the semen was deposited on it?

6 A I do.

7 Q And where would that be?

8 MR. EVANS: Judge, I object to that unless some  
9 expertise can be shown that she's qualified to answer that  
10 question.

11 THE COURT: Overruled. I'll let her answer.

12 A It is my opinion that one of the pillows in Exhibit  
13 Number 87 was at one time under the body of [REDACTED].

14 Q (By Mr. Elliott) And in reference to State's Exhibit  
15 88 --

16 MR. ELLIOTT: And may I approach the witness,  
17 Judge?

18 THE COURT: Yes.

19 Q (By Mr. Elliott) -- which is the flat sheet -- okay.

20 In reference to State's 88 --

21 First of all, you indicated earlier that you  
22 took various questioned samples from there. Can you open  
23 State's 88 and show those to us, please?

24 THE WITNESS: Your Honor, I'll need assistance  
25 with this. May I step down, please?

1                   THE COURT: Yes.

2       A         Now, as I stated earlier, I took a number of cuttings  
3       from the stains on this sheet. The largest semen stain  
4       sample was found in this area (indicating), which I called my  
5       Q2. The rest of the cuttings I took -- I also identified  
6       urine on this sheet, in addition to various bloodstains and  
7       semen stains. And again, the greatest amount was found here  
8       (indicating). I also identified semen stains on some --  
9       mixed in with blood over here (indicating) that appeared to  
10      be wipe marks.

11      Q         (By Mr. Elliott) Could you explain what you mean by  
12      that?

13      A         A bloody object had come in contact with blood that  
14      was consistent with the blood type of Mrs. [REDACTED]. It also  
15      had -- Miss [REDACTED]. I'm sorry. And also had some semen  
16      mixed in with it. It was wiped across this sheet.

17      Q         Okay.

18                   MR. ELLIOTT: Your Honor, may we approach, Your  
19      Honor?

20                   THE COURT: Yes.

21      Q         (By Mr. Elliott) I'll now hand you what's been marked  
22      for identification purposes as State's Exhibits 125, 126, and  
23      127 and ask you to look at those please. Can you tell me  
24      what those are?

25      A         Yes, I can. These are cuttings taken by Janice Davis

1       in reference to a sheet obtained from the crime scene of Anna  
2       Fowler.

3       Q        Okay. Thank you.

4                  I believe you indicated this earlier in this  
5       case. If not, do you have an opinion based on your  
6       observations of the pillow in State's Exhibit 87 and the  
7       sheet in State's Exhibit 88 as to the possible number of  
8       ejaculations that occurred?

9       A        I do.

10      Q        And what is that opinion?

11      A        My opinion that it had to have occurred at least two  
12     or more, ejaculations.

13                  THE COURT: Anything further?

14                  MR. MACY: Just a second, Judge.

15      Q        (By Mr. Elliott) Miss Gilchrist, do you have an  
16     opinion as -- you indicated on State's Exhibit 88 that  
17     something had been smeared, contained a mixture of Mrs.

18      [REDACTED] blood and seminal fluid or semen. Do you have an  
19     opinion as to what object made that or what this wiping  
20     motion was made with?

21                  MR. EVANS: Your Honor, once again, note my  
22     objections to lack of foundation that she has any particular  
23     expertise in blood splatter or blood pattern analysis.

24                  THE COURT: Overruled. She may answer.

25      A        Yes, I do have an opinion.

1 Q (By Mr. Elliott) And what is that, please?

2 A It is my opinion that possibly fingers made those  
3 marks.

4 MR. ELLIOTT: No further questions, Judge.

5 THE COURT: You may cross-examine.

6 CROSS-EXAMINATION

7 BY MR. EVANS:

8 Q Miss Gilchrist, as somebody who barely made it through  
9 high school chemistry, if you bear with me on some of these  
10 ideas and concepts.

11 Let's start with hair comparisons generally.

12 Can we conclude that since no hairs matching or no hairs that  
13 are consistent with an individual found at a crime scene that  
14 that individual is eliminated?

15 A I wouldn't conclude that, no.

16 Q Had you found no hairs at all consistent with  
17 Robert's, you still would not have been prepared to come to  
18 court and testify that he can be eliminated as a suspect due  
19 to the fact that none of his hair's been found; is that  
20 right?

21 A That I'm not prepared to eliminate him?

22 Q Well, I suppose that's a complicated way of asking you  
23 the question.

24 The fact that you find -- the fact that you do  
25 not find an individual's hairs at the scene or rather an

1 individual's -- or hairs that are consistent with any given  
2 individual doesn't mean you exclude him as a possible  
3 suspect; is that correct?

4 A That's correct. There are other factors to take into  
5 consideration.

6 Q Now, we know certain things about Miss [REDACTED] blood;  
7 right?

8 A That's correct.

9 Q We know that she was an "O" secretor type blood;  
10 right?

11 A That's correct.

12 Q So, when we find a semen stain that corresponds to an  
13 "A" type blood, we know -- well, obviously she couldn't  
14 create the semen.

15 A That's correct.

16 Q We know that the person who deposited that is an "A;"  
17 right?

18 A That's right.

19 Q Now, to skip through several steps --

20 MR. EVANS: Can I approach the witness, Judge?

21 THE COURT: Yes.

22 Q (By Mr. Evans) There's an individual that I'm  
23 interested in, the individual that you tested known as Rod  
24 Wilson and his alias is Ra-Heru Khepra. It's spelled R-A,  
25 hyphen, H-E-R-U, and then Khepra, last name,

1 capital K-H-E-P-R-A.

2 A Okay.

3 Q You tested that individual in regard to the Cutler  
4 case; is that right?

5 A That's correct.

6 Q And you found that he was a blood type "A" secretor;  
7 is that right?

8 A That's right.

9 Q He's an Esterase (1), ESD (1). I didn't say that  
10 right. It's ESD (1); right?

11 A ESD (1), yes.

12 Q But that's meaningless for purposes of our analysis  
13 because ESD doesn't show up in semen; correct?

14 A That's correct.

15 Q So, that's worthless for our analysis in this case.

16 We know that Khepra is a PGM (1); correct?

17 A Yes; that's correct.

18 Q And that's consistent with the PGM that you broke out  
19 in some of the stains in this case; is that right?

20 A That's correct.

21 Q And in all fairness it's also consistent with Miss  
22 Cutler's PGM type.

23 A That is also correct.

24 Q So, we can't tell whether Khepra or, to be fair,  
25 Robert Miller -- he's also a PGM (1); right?

1 A That's right.

2 Q So, Miss [REDACTED] Mr. Khepra, and Robert all have PGM  
3 (1).

4 A That is correct.

5 Q Okay. So, for purposes of our analysis of this case,  
6 the PGM is also not of great significance; correct?

7 A Well, not necessarily. Some of the stains off some of  
8 the items that I analyzed, I picked up an ABO type "A" blood  
9 group substance, no "H." I picked up PEPA (1), PGM (1), no  
10 ESD. That leaves me to conclude that probably that  
11 information I'm getting is coming from the semen donor and  
12 not the victim. Okay? So, that tells me that at least a  
13 semen donor is an "A" secretor and he's a PGM (1).

14 Q Which is consistent with both Khepra --

15 A That is consistent with both Ra-Heru and Robert  
16 Miller.

17 Q Okay. Now, we have the enzyme PEPA. Khepra is a (1)  
18 as is Robert; is that correct?

19 A That's correct.

20 Q That enzyme is exactly the same in both of them;  
21 right?

22 A That's correct.

23 Q And that is also an enzyme that was found in some of  
24 your analyses of the semen stains in this case.

25 A That's correct.

1 Q Then we come over to the next subtype -- the next  
2 genetic marker is the PGM-subtype. Now, we know Miss [REDACTED]  
3 is a (1+) subtype.

4 A Yes.

5 Q Which is consistent with some of the stains -- or in  
6 fact all of the stains that you were able to subtype had a  
7 (1+); right?

8 A That's correct.

9 Q Now, Robert Miller has a (1-), which is inconsistent  
10 with the semen stains that you were able to subtype; right?

11 A That's correct.

12 Q And Ra-Heru Khepra is a (1+), which is consistent with  
13 the semen stain you were able --

14 A That's correct.

15 Q -- to type; correct?

16 A That's correct.

17 Q Now, you eliminated Mr. Khepra in this case based on  
18 the fact that his hairs did not match?

19 A That is correct.

20 Q Okay. But it's not on the basis of any serology.

21 A Serologically I could not exclude him. I had to go  
22 ahead and do the hair comparisons in order to say whether or  
23 not he could be still a possible suspect.

24 Q The fact that you found no hairs at Mrs. [REDACTED]  
25 scene that are consistent with the hairs of Ra-Heru Khepra

1 led you to eliminate Mr. Khepra; is that right?

2 A That's right.

3 MR. EVANS: If the Court will bear with me --

4 THE COURT: All right.

5 MR. EVANS: -- I'll proceed in just a second.

6 Q (By Mr. Evans) Just so we're clear, moving to hair  
7 analysis -- back to hair analysis, a hair is not like a  
8 fingerprint.

9 A No, it's not.

10 Q Right?

11 If you have somebody's fingerprint, there's  
12 none of this consistent or inconsistent. It's either him or  
13 it's not; right?

14 A Pretty much so, yeah. There are points of identifying  
15 characteristics to identify someone.

16 Q You have sufficient sample, so to speak; right?

17 A Correct.

18 Q Okay. And you're not saying when you say that two of  
19 the fragments that you found in bed are consistent with  
20 Robert. You're not saying that they're his hairs, are you?

21 A No, I'm not.

22 Q It's certainly possible that the hairs were donated  
23 there by somebody else.

24 A There's always that possibility. All I can say is  
25 those hairs could have come from Robert Lee Miller.

1 Q And when we talk about comparing animal hairs, or the  
2 animal hairs that you compared in this case, when you say  
3 that the hairs are consistent with a dog named Bear, you're  
4 not saying that the hairs came from that dog, are you?

5 A No, I'm not.

6 Q You're saying that it's a possibility.

7 A It's a possibility they could have came from that dog.

8 Q But it could have come from a number of other dogs;  
9 correct?

10 A Correct.

11 Q Would you consider -- I've got the Handbook of  
12 Forensic Science put out by the F.B.I., Joyce. Would you  
13 consider that a good resource material?

14 A Resource for what?

15 Q Well, for learning about hair analysis.

16 A No, I wouldn't.

17 Q You would not consider this an authoritative text  
18 then.

19 A No.

20 Q Okay. Do you know Janice Davis Lyhane?

21 A Yes, I do.

22 Q Okay. Scientific Evidence in Criminal Cases by  
23 Moenssens, Moses, and Inbau. Would you consider this an  
24 authoritative text?

25 A I've never read that book. I've seen passages from

1       that book, but I've never actually read it.

2       Q        Okay. Would you agree with this passage: Animal hair  
3       comparisons are usually not as determinative and conclusive  
4       as human hair comparisons. The variations found in the hair  
5       from a single animal can be very great. It is also difficult  
6       to differentiate between breed of a same animal family by  
7       hair comparison.

8                          Would you agree with that statement?

9       A        I would. I would, yes.

10      Q        And when you say that the hairs are consistent with  
11       the dog Bear, we can't even break down whether the hairs came  
12       from a rottweiler or a Labrador retriever or any other dog  
13       with black hair; is that correct?

14      A        That's correct. I'm comparing the unknown hairs with  
15       reference hairs taken from -- obtained from rottweilers in  
16       this particular case. Had there been Labrador reference  
17       hairs, I would have compared those and drawn whatever  
18       conclusions possible.

19      Q        Mr. Elliott ran down the hairs that were found at or  
20       near the scene of Mrs. [REDACTED] bed. There's some things  
21       that perhaps -- let me direct your attention to that part in  
22       your report, Joyce. There are some things that perhaps you  
23       went over that I missed. Let me -- bear with me, please.

24                          THE COURT: Just stand behind the podium,  
25       please.

1                   MR. EVANS: Yes, sir.

2 Q       (By Mr. Evans) You examined some hairs that were  
3 taken from a black sock that was found in Miss [REDACTED] bed;  
4 is that correct?

5 A       I did.

6 Q       Okay. And you found no hairs as to that black sock  
7 that were consistent with Robert Miller, did you?

8 A       No, I did not.

9 Q       You found a scalp hair that was consistent with [REDACTED]  
10 [REDACTED]; right?

11 A       Yes. Yes.

12 Q       But you also found one Negroid scalp hair that was not  
13 consistent with either Miller or anybody else; is that  
14 correct?

15 A       That's correct.

16 Q       So, we have a Negroid hair on the sock that was found  
17 under the covers of Miss [REDACTED] bed that's inconsistent  
18 with Robert Miller and could not have come from him; correct?

19 A       That's correct.

20 Q       Absolutely 100 percent could not have come from Robert  
21 Miller.

22 A       That's correct; it could not have.

23 Q       And moving along down to the knotted pillow case that  
24 you examined and looked at some hairs that were found around  
25 the knotted pillow case, as to that item, you found no hairs

1       that were consistent with Miss [REDACTED]; correct?

2       A       That's correct.

3       Q       You found no hairs that were consistent with Robert  
4           Miller; correct?

5       A       That's incorrect.

6       Q       Okay.

7       A       The asterisk by that hair, Mr. Evans, means that that  
8           hair was not suitable for forensic comparison; therefore, I  
9           can't say whether or not it came from Mr. Miller.

10      Q       Okay. I think my question was you found none  
11           consistent with Miller.

12      A       I can't answer that. I don't know if they're  
13           consistent with. They weren't suitable for forensic  
14           comparison.

15      Q       Okay. And also you found as to that knotted pillow  
16           case one Negroid limb hair that was suitable for forensic  
17           comparisons; correct?

18      A       Well, it was a short limb hair. I have no reference  
19           limb hairs to compare. And the F.B.I. also recommends --

20      Q       Well, that's not my question.

21      A       Well --

22      Q       If I could get an answer to my question first.

23      A       Okay.

24      Q       You found one Negroid limb hair that was suitable for  
25           microscopic comparison that was on the knotted pillow case;

1 is that right?

2 A Not necessarily.

3 Q I guess I'm misreading your report then.

4 Go ahead. Say what you were going to say.

5 A What I wanted to say is that in our training with the  
6 F.B.I., they admonish us. We can identify body origins,  
7 where a hair could have come from. But there are too many  
8 limiting characteristics found in limb hairs to allow them to  
9 be suitable for forensic comparisons. And that's what I was  
10 trying to say to you.

11 Q So, we can draw no conclusions from the last Negroid  
12 limb hair as to the knotted pillow case; is that right?

13 A That's correct.

14 Q Okay. Moving on to the flat sheet, you found four  
15 Caucasian limb hairs that were not consistent with [REDACTED]

16 [REDACTED] on the flat sheet; is that correct?

17 A Well, I don't know if they're consistent with her or  
18 not, because I didn't get any reference limb hairs from [REDACTED]  
19 [REDACTED].

20 Q Same answer as to the last hair?

21 A Same answer to the last hair.

22 Q Okay. Now, as to the Amcare sheet, the top sheet, you  
23 found a scalp hair that was consistent with [REDACTED] is  
24 that right?

25 A That's right.

1 Q You found a pubic hair that was consistent with [REDACTED]

2 [REDACTED]  
3 A That's correct.

4 Q You found no hairs consistent with Robert Miller; is  
5 that right?

6 A That's correct.

7 Q You found a Caucasian scalp hair that was not  
8 consistent with [REDACTED]; right?

9 A That hair showed points of similarities, but there  
10 were also some dissimilarities, and that caused me to have to  
11 exclude her as being the possible source.

12 Q So, can we say that the first Caucasian scalp hair on  
13 the top sheet was not [REDACTED]?

14 A That's what I'm concluding, yes.

15 Q All right. You found a Caucasian pubic hair,  
16 Caucasian pubic hair on the top sheet that was not  
17 consistent, inconsistent with [REDACTED]; is that right?

18 A Again, the characteristics in that hair were such that  
19 it did not allow me to make a definite -- arrive at a  
20 definite conclusion. And that hair had been awhile also.

21 Q Okay.

22 MR. EVANS: May I approach the witness, Judge?

23 THE COURT: Yes.

24 Q (By Mr. Evans) Make sure we're reading off the same  
25 report, Miss Gilchrist. This is the report I'm looking at.

1 It's --

2 A We have the same one.

3 Q Is it the same one?

4 A Uh-huh.

5 Q The report I'm looking at has the Caucasian pubic hair  
6 under your "hairs not consistent with any of these"  
7 category. Is it the same place in your report?

8 A That's in the same place.

9 Q Okay. And also there was a Negroid hair fragment on  
10 the top sheet that you have under the heading "hairs not  
11 consistent with any of these;" is that correct?

12 A That's correct.

13 Q So, that Negroid scalp hair is not consistent with  
14 Robert Miller.

15 A That is correct; it is not consistent.

16 Q Could not have come from him.

17 A Could not have come from him.

18 Q Okay. You're of the opinion that the -- whoever did  
19 this to Miss [REDACTED] would have ejaculated several times.

20 A At least twice.

21 Q So, there was -- we can speak in relative terms as to  
22 the scenes of rapes and sexual assaults. There was,  
23 relatively speaking, a large amount of seminal fluid at this  
24 scene; is that right?

25 A There were a large number of seminal stains. Now, the

1 amount of volume I can't tell you because it also got mixed  
2 in with blood.

3 Q You are familiar, aren't you, Miss Gilchrist, with a  
4 process known as DNA analysis?

5 A I am.

6 Q That analysis has been done in a case that is coming  
7 up pretty soon involving a defendant named Hayward Reed; is  
8 that correct?

9 A That's correct.

10 Q That DNA analysis involved getting a sample of seminal  
11 type fluid; is that right?

12 A No, that's not correct.

13 Q Okay. What did you have in that Hayward Reed case as  
14 far the crime scene samples?

15 MR. ELLIOTT: Judge, I'm going to object as to  
16 was or wasn't --

17 THE COURT: Sustained.

18 I don't want to get into any other case,  
19 counselor.

20 Q (By Mr. Evans) The reason for asking the question,  
21 Miss Gilchrist -- let me put it to you this way. DNA  
22 analysis is a process in which we don't need to talk about  
23 consistent with or inconsistent with. It's like a  
24 fingerprint; is that correct?

25 A That's correct.

1 Q It's even better than a fingerprint, isn't it?

2 A It's like a fingerprint. It I.D.'s someone like a  
3 fingerprint, yes.

4 Q It I.D.'s somebody exactly, that they donated this  
5 semen.

6 A I'm not sure exactly how the wording is on that. The  
7 percentile is pretty high, that it could have come from one  
8 person to the exclusion of so many other people.

9 Q Usually like one in four million; right?

10 A Or higher, yes.

11 Q Or higher than four million.

12 A Yes.

13 Q And that was not done in this case, was it?

14 A No, it was not.

15 Q We had the semen. You had the semen. You had a large  
16 amount of semen, relatively speaking, that you could have  
17 packaged up and sent to Lifecodes in New York, and they could  
18 have done the DNA analysis in this case, and we could have  
19 known, 100-percent sure whether we had the right man; isn't  
20 that correct?

21 MR. ELLIOTT: Judge, objection as to that  
22 because he's purely speculative there.

23 THE COURT: Sustained.

24 MR. ELLIOTT: There's no testimony to that.

25 THE COURT: Sustained.

1 Q (By Mr. Evans) The DNA analysis could have been done  
2 in this case; is that right?

3 MR. ELLIOTT: Again, Judge, objection. That  
4 might be -- objection as to outside the scope of this  
5 witness. Again, it would be speculative as to what might  
6 have been done.

7 THE COURT: Sustained.

8 MR. EVANS: Judge, can we approach the bench?

9 THE COURT: You may, counselor, but I want to  
10 just make my rulings and we move on, right or wrong.

11 (The following was said outside the hearing of the  
12 jury:)

13 MR. EVANS: Okay. Judge, I need to make a  
14 record.

15 I would argue to the Court that the DNA  
16 analysis, which she's already testified she's familiar with,  
17 she's already testified as to the possible results that DNA  
18 analysis can attain, I want to know why it wasn't done in  
19 this case. I don't know why that's --

20 Let me finish, please.

21 I don't know that's any different than asking  
22 somebody that investigated a crime scene who knows about  
23 fingerprints why they didn't test for fingerprints. I don't  
24 see any difference in the two. Now, all I want to ask her is  
25 why it wasn't done in this case. And if there's a good

1 reason, there's a good reason.

2 THE COURT: The State?

3 MR. MACY: Your Honor, this is a process of  
4 which became available in only the fairly recent past. There  
5 is one laboratory in the United States that does it. It is  
6 financially prohibitive for us to submit all of our cases to  
7 have that kind of testing. It's not practical. It is not a  
8 test that's available to us. We don't have experts here to  
9 testify, but I know from being lectured on it that the degree  
10 of certainty that you get, it depends on the quantity of it,  
11 the conditions of it under which it's been kept, and all that  
12 sort of thing.

13 What he's bringing in now -- he's making it  
14 look like we haven't done our job.

15 MR. EVANS: That's exactly right.

16 MR. MACY: When in fact that's unethical. He  
17 knows that we have.

18 THE COURT: Just a moment, please.

19 MR. MACY: We've done everything --

20 MR. EVANS: And I resent that.

21 THE COURT: Just a moment.

22 Mr. Evans, you're going to not only subject  
23 yourself to a loss in your pocketbook but a loss of some  
24 freedom in the county jail if we have one more outburst.

25 MR. EVANS: Well, I didn't --

1                   THE COURT: All of you govern yourselves  
2 accordingly. I mean just that.

3                   MR. EVANS: Yes, sir.

4                   Your Honor, if I might speak.

5                   THE COURT: Yes.

6                   MR. EVANS: I didn't mean any disrespect to the  
7 Court. If it took it as that, I apologize.

8                   If it's financially prohibitive, she can say  
9 that. That's fine. I just want to know if it was around. I  
10 wanted it stated that it was around, it could have been done  
11 in this case. I can call a witness to testify that it could  
12 have been done in this case if need be.

13                  THE COURT: I'm not going to let you pursue  
14 anymore along that line with this witness.

15                  MR. EVANS: All right. Let me make an offer of  
16 proof then, if I may.

17                  THE COURT: Go ahead.

18                  MR. EVANS: I would make this offer of proof:  
19 That if Miss Gilchrist were asked could DNA have been done in  
20 this case, she would say, yes. I've asked her that off the  
21 record and she has told me it could have been done in this  
22 case. I would ask her why it wasn't done in this case. The  
23 answer that she would give me as to why it wasn't done in  
24 this case is that she didn't think of it.

25                  I would further make an offer of proof that

1 it's not cost prohibitive, that it was done in a rape case  
2 where the State is not seeking the ultimate penalty of  
3 death. It was done in rape case. It is going to be  
4 introduced in a rape case within the next two weeks in the  
5 case of State versus Hayward Reed.

6 I would further state for the record that as my  
7 offer of proof that there is not --

8 (The following was said within the hearing of the  
9 jury:)

10 THE COURT: Let me ask the jury to please not  
11 talk in the jury box at all.

12 (The following was said outside the hearing of the  
13 jury:)

14 MR. EVANS: There is not only one lab that does  
15 this. There's currently three labs that do DNA analyses  
16 now. That it could have been done in this case, and it  
17 should have been done in this case.

18 THE COURT: I'm not concerned with the cost  
19 factor, frankly, gentlemen. I'm concerned with this being  
20 outside the expertise of this witness. It's unlike asking a  
21 police officer why were prints not taken. This is not within  
22 the investigative -- her knowledge is not within that. Hers  
23 is to examine things that are presented to her.

24 I'm not going to let you go into with her, this  
25 witness, why this was not done by the State.

1 MR. EVANS: I respect the Court's ruling.

2 THE COURT: All right.

3 MR. MACY: Your Honor, I apologize for my  
4 outburst.

5 (The following was said within the hearing of the  
6 jury:)

7 MR. EVANS: I have no further questions of this  
8 witness.

9 THE COURT: Any further from the State?

10 MR. ELLIOTT: Yes, Your Honor.

11 REDIRECT EXAMINATION

12 BY MR. ELLIOTT:

13 Q Miss Gilchrist, Mr. Evans just asked you in reference  
14 to Mr. Khepra -- I'm probably not pronouncing it correctly.  
15 I'm referring to the person who's also known as Roderick  
16 Wilson. I can say Wilson a little better. He asked you that  
17 Mr. Wilson or Khepra had been eliminated because you had  
18 found no hairs that were consistent with the hairs of Mr.  
19 Khepra. I believe your response was "yes."

20 A That's correct.

21 Q But you did find hairs that were consistent with  
22 Robert Lee Miller.

23 A I did.

24 Q Now, are you familiar with the term "transfer hairs?"

25 A I am.

1 Q Can you explain to us what that is?

2 MR. EVANS: Judge, I object, because that's  
3 beyond the scope of cross.

4 MR. ELLIOTT: Judge, he got into the fact  
5 that --

6 THE COURT: Overruled.

7 Q (By Mr. Elliott) You may answer.

8 A Okay. Transfer hairs are hairs that are dropped from  
9 a body, the scalp or pubic area, that land on either clothing  
10 or chairs or floors and things like that or bedding, things  
11 like that, that could be brought from one place --  
12 transferred from one place to another by an object or a  
13 person.

14 Q So, if there's a hair in this chair and I sit in this  
15 chair and the hair adheres to my body, when I move over here,  
16 I transfer that hair with me.

17 A That's correct.

18 MR. EVANS: Objection as leading.

19 THE COURT: Please stand.

20 MR. EVANS: Objection as leading.

21 THE COURT: Sustained.

22 MR. ELLIOTT: No further questions, Judge.

23 THE COURT: Any further cross-examination?

24 MR. EVANS: No, nothing further.

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

1       in the scientific community and that it would assist the  
2       trier of fact.

3                   I don't think they met their burden, and we  
4       would object to the evidence.

5                   THE COURT: I would think that Frye, in logic,  
6       it requires a prima facia showing, which has been made.  
7       Then, of course, you may put on something in opposition to  
8       that, if you care to. I don't know that there's any magical  
9       number of people the State must put on to meet the test.

10                  I think what this witness has testified to is  
11       sufficient. That will be my ruling.

12                  MR. EVANS: Yes, sir.

13                  THE COURT: Anything further?

14                  MR. EVANS: No.

15                  THE COURT: All right.

16                  (Whereupon, the following transpired in open court,  
17       the defendant personally present with counsel,  
18       counsel for the State present, and the jury in the  
19       box:)

20                  THE COURT: You're still testifying under oath,  
21       Miss Gilchrist.

22                  THE WITNESS: Yes, your Honor.

23                  THE COURT: The State needs to ask one or two  
24       more questions, I think.

25                  JOYCE GILCHRIST,

1       recalled as a witness on behalf of the State of Oklahoma,  
2       having been previously sworn, testified as follows:

3                                  DIRECT EXAMINATION

4       BY MR. ELLIOTT:

5       Q       Miss Gilchrist, as it became quite apparent awhile  
6       ago, I handed you some evidence from the Fowler case, and  
7       we're off that case.

8                                  MR. ELLIOTT: Now, I need to approach the  
9       witness again, Your Honor, if I may.

10                                 THE COURT: All right.

11       Q       (By Mr. Elliott) I'll now hand you what's been marked  
12       for identification purposes as State's Exhibits 128, 129,  
13       130, 131, 132, and 133, and ask you to look at those,  
14       please. Can you tell me what those are, please?

15       A       Again, these are cuttings from evidence that I took in  
16       reference to the [REDACTED] homicide.

17       Q       And when you say "cuttings," those are the pieces that  
18       you actually cut out of the exhibits such as shown in the  
19       pillow, State's 87?

20       A       That's correct.

21       Q       All right. How do you know those are the cuttings?

22       A       They bear my initials and my case number and  
23       laboratory item numbers.

24       Q       Okay. Did you have an occasion to send those to  
25       anyone for further analysis in this case?

1 A I did.

2 Q Okay. When did you do that?

3 A Approximately late September of 1987.

4 Q And to whom did you send them?

5 A To Dr. Moses Schanfield in Atlanta, Georgia.

6 Q And what condition were those exhibits in when you  
7 sent them to Dr. Schanfield?

8 A They were in a sealed and closed condition.

9 Q Now, I again hand you State's Exhibits 89A and 100,  
10 which have previously been introduced, and ask you if you  
11 have had an occasion to send those to anyone?

12 A I did.

13 Q Okay. And to whom did you send those?

14 A Dr. Moses Schanfield.

15 Q Again, what condition were those when you sent them to  
16 him?

17 A They were in a sealed and closed condition.

18 Q All right.

19 MR. EVANS: I've already seen them. I have no  
20 objection to the introduction.

21 MR. ELLIOTT: We move admission of State's 128,  
22 129, 130, 131, 132, and 133.

23 THE COURT: Any objection?

24 MR. EVANS: No, sir.

25 THE COURT: They're all admitted.

1                   MR. ELLIOTT: We have nothing further of the  
2 witness, Judge.

3                   THE COURT: Any questions of this witness?

4                   MR. EVANS: No questions.

5                   THE COURT: Thank you.

6                   THE WITNESS: Thank you, Your Honor.

7                   THE COURT: You may call your next.

8                   MR. MACY: May it please the Court.

9                   IRVIN C. STONE,  
10                  called as a witness on behalf of the State of Oklahoma,  
11                  having been first duly sworn, testified as follows:

12                  DIRECT EXAMINATION

13                  BY MR. MACY:

14                  Q       Will you state your name, please, sir?

15                  A       Irvin C. Stone.

16                  Q       And what is your occupation or profession, sir?

17                  A       I am the chief of the Physical Evidence Section at the  
18                  Institute of Forensic Sciences in Dallas.

19                  Q       And what is your educational background, sir?

20                  A       I have a bachelor of science in geology from the Iowa  
21                  State University and a master of science and PhD in  
22                  geochemistry from the George Washington University.

23                  Q       What is your work experience, your experiential  
24                  background, sir?

25                  A       I was a special agent in the F.B.I. for six and a half

1                   MR. MACY: She has been previously sworn,  
2 Judge.

3                   THE COURT: Yes. You're still testifying under  
4 oath, Miss Gilchrist.

5                   MR. MACY: May it please the Court.

6                   JOYCE A. GILCHRIST,  
7 recalled as a witness on behalf of the State of Oklahoma,  
8 having been previously sworn, testified as follows:

9                   DIRECT EXAMINATION

10 BY MR. MACY:

11 Q                You're the same Joyce Gilchrist who testified earlier  
12 in this proceeding?

13 A               I am.

14 Q                You're a forensic serologist for the Oklahoma City  
15 Police Department; is that correct?

16 A               That's correct.

17 Q                You previously testified that the semen donor had to  
18 be an "A" secretor and a PGM (1). What is the frequency in  
19 the black and white population?

20 A               Okay. In the black population the frequency will be  
21 approximately eight percent or one in 12 people. In the  
22 white population the frequency will be approximately 19  
23 percent or one in five people.

24 Q               Dr. Schanfield testified last Friday about allotypes.  
25 How do allotypes relate to blood type and PGM?

1 A Okay. Allotypes are genetic markers in themselves,  
2 and they aid in identifying the probable race of the semen  
3 donor. Now, when you combine that information with the blood  
4 typing PGM status, it narrows down the possibility of the  
5 number of people in a particular race who could be the semen  
6 donor.

7 Q All right. Dr. Schanfield testified that one in three  
8 blacks, 33 percent, or approximately .5 percent, one half of  
9 one percent, of the whites could be the donors of the markers  
10 that he tested for. What would be the combined frequency of  
11 "A" secretor, PGM (1), and these allotypes?

12 MR. EVANS: Your Honor, note my objections for  
13 the reasons stated in camera.

14 THE COURT: Yes. We'll so note. The record  
15 notes it.

16 All right.

17 Q (By Mr. Macy) Again, what would be the frequency  
18 among the black and white population persons being type "A"  
19 secretor, PGM (1), with the allotypes that he testified  
20 about?

21 A Okay. With those combined frequencies you'd expect  
22 about one in 36 blacks and about one in 1,000 whites.

23 Q All right. You tested the blood of Robert Miller.  
24 Would Robert Miller, Jr.'s, secretions, seminal fluids and  
25 blood, fit in this group?

1 A It would, yes.

2 Q One out of 36?

3 A That's correct.

4 Q At the crime scene you testified that you found  
5 numerous short black hairs.

6 A Correct.

7 Q As a forensic chemist what would this indicate to you?

8 A It would indicate to me that the person did not take  
9 very good care of his hair, a lot of damage was prevalent.

10 Q You took samples of hair from the defendant; is that  
11 correct?

12 A I did, yes.

13 Q What did you find the condition of his hair to be when  
14 you took those samples?

15 A It was not in very good shape.

16 Q What effect, if any, would wearing a cap have as far  
17 as losing hairs, distributing hairs at a crime scene?

18 A It would limit or prohibit loss of a number of hairs.

19 Q In addition to the other tests and things that you've  
20 talked about, did you run any additional tests in this case  
21 forensically?

22 A I did.

23 Q And what was that?

24 A I conducted a test called ortho-tolidine screen on the  
25 body of [REDACTED].

1 Q What was the purpose of that test?

2 A That was to -- in an effort to try to identify any  
3 type of prints that may have been present on the body that  
4 were not visible to the naked eye.

5 Q And did you obtain any results from that?

6 A I obtained an outline of a hand on the upper left  
7 thigh area of Mrs. [REDACTED] but no latent detail was seen.

8 Q Why did you run this test?

9 A To -- in an effort to try to determine or identify who  
10 perpetrated this particular crime could have been.

11 MR. MACY: No further questions.

12 Your witness, counsel.

13 THE COURT: You may cross-examine.

14 MR. EVANS: I have no questions based on that.

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

16 Call your next, State.

17 You've testified before --

18 THE WITNESS: Yes.

19 THE COURT: -- and you're still testifying  
20 under oath.

21 THE WITNESS: Yes.

22 BILL CITY,

23 recalled as a witness on behalf of the State of Oklahoma,  
24 having been previously sworn, testified as follows:

25 DIRECT EXAMINATION

1 A 135? It was submitted to Serology.

2 Q In what condition was it in?

3 A Since then it's been altered. It was in a sealed  
4 condition when I submitted it.

5 Q Okay. You mean by "altered" that the envelope's been  
6 opened.

7 A Yes, sir; that's correct.

8 MR. ELLIOTT: No further questions, Your Honor.

9 THE COURT: You may cross-examine.

10 MR. EVANS: No questions, Judge.

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

12 Call your next, State.

13 MR. MACY: She's been previously sworn.

14 THE COURT: Yes.

15 You've been previously sworn and you're still  
16 testifying under oath.

17 THE WITNESS: Thank you, Your Honor.

18 JOYCE A. GILCHRIST,

19 called as a witness on behalf of the State of Oklahoma,

20 having been previously sworn, testified as follows:

21 DIRECT EXAMINATION

22 BY MR. ELLIOTT:

23 Q Once again for the record, would you state your full  
24 name?

25 A My name is Joyce A. Gilchrist.

1 Q And you're the same Joyce Gilchrist that's testified  
2 three or four times previously in this case.

3 A I am.

4 Q Okay. Now, Miss Gilchrist, I'd like to ask you in  
5 your capacity as a forensic chemist for the Oklahoma City  
6 Police Department if you received any evidence in reference  
7 to a burglary occurring at 1813 Northwest 28th Street.

8 A I did.

9 Q And from whom and what date did you receive that?

10 A The evidence was submitted to our laboratory on  
11 February 12th, 1987, by Specialist Ed Southard.

12 MR. ELLIOTT: May I approach the witness, Your  
13 Honor?

14 THE COURT: Yes.

15 Q (By Mr. Elliott) I'll hand you what's been marked as  
16 State's Exhibit Number 135 and ask you to examine this,  
17 please. Can you tell me what that is?

18 A Yes, I can. It's an evidence envelope containing  
19 hairs found at the point of entry at 1813 Northwest 28th  
20 Street.

21 Q And what is contained inside that envelope?

22 A A white envelope that contained a bindle that  
23 contained the hairs.

24 Q Okay. And how do you recognize those two particular  
25 envelopes?

1 A Because they both bear my initials, case number and  
2 laboratory item number.

3 Q Okay. What condition were those envelopes when you  
4 received them?

5 A In a sealed and closed state.

6 Q After you received State's Exhibit 135 and what is  
7 contained therein, what if anything did you do with that?

8 A I opened the envelope from the opposite end, removed  
9 the contents therein, gave an inventory number, and proceeded  
10 to do an examination on the hairs.

11 Q Okay. And when you say "examination," would that be  
12 an examination like the examination that you've previously  
13 gone through for the ladies and gentlemen of the jury?

14 A Forensic hair comparison, yes.

15 Q And with what did you compare the hairs contained in  
16 State's 135?

17 A With the hairs that have already been offered into  
18 evidence, State's exhibit numbers that have already been  
19 entered into evidence as hairs obtained from Robert Lee  
20 Miller.

21 Q Based upon that comparison did you arrive at any  
22 conclusions?

23 A I did.

24 Q Could you tell me what those are, please?

25 A That two scalp hair fragments taken from the window

1 bottom frame are consistent microscopically with reference  
2 hairs obtained from Robert Lee Miller, Jr.; therefore, these  
3 hairs could have come from Miller.

4 MR. ELLIOTT: At this time, Your Honor, we'd  
5 move admission of State's 135.

6 THE COURT: Any objection?

7 MR. EVANS: No, sir.

8 THE COURT: It's admitted.

9 MR. ELLIOTT: No further questions.

10 THE COURT: You may cross-examine.

11 MR. EVANS: No questions.

12 THE COURT: Thank you.

13 THE WITNESS: Thank you, Your Honor.

14 THE COURT: You may stand down.

15 MR. MACY: May it please the Court.

16 Comes now the State and moves to incorporate  
17 all of the evidence from the first stage of this trial into  
18 the second stage.

19 THE COURT: It will be done.

20 All evidence, members of the jury, that you've  
21 already received in the first stage of this trial will be  
22 before you for your consideration in this second stage.

23 MR. MACY: With that, Your Honor, the State  
24 rests.

25 THE COURT: The State rests?