

4 MS. ALLEN: Thank you.

5 RUTH A. WILBARGER,

6 being duly sworn, was examined and testified as follows:

7 DIRECT EXAMINATION

8 BY MS. ALLEN:

9 Q Would you state your name, please?

10 A Ruth A. Wilbarger.

11 Q What is your occupation?

12 A I am a serologist.

13 Q By whom are you presently employed?

14 A By the Tampa Regional Crime Lab, Florida Depart-  
15 ment of Law Enforcement.

16 Q And how long have you been so employed?

17 A For approximately four years.

18 Q Mrs. Wilbarger, what is your educational back-  
19 ground?

20 A I have a Bachelor of Science degree in biology  
21 from Florida Southern College.

22 Q Do you have any specialized training in your  
23 field other than your formal education?

24 A Yes. I have a year of training with the depart-  
25 ment and included in this training was six months of

4 serology?

5 A Yes, it is.

6 Q Have you ever testified in a court as an ex-  
7 pert?

8 A Yes, I have.

9 Q How many times?

10 A Approximately five.

11 Q In what jurisdictions have you testified?

12 A Hillsborough County, Pinellas County and Polk  
13 County.

14 Q Would you tell us, please, what the nature of  
15 your work in serology is?

16 A In serology, I examine evidence, basically, for  
17 the presence of blood and other body fluids.

18 Q And what body fluids do you analyze or examine?

19 A Usually, it's blood, saliva, vaginal swabs and  
20 semen analysis also.

21 Q Could you tell us how many analyses you have  
22 performed in the area of blood?

23 A Over a thousand for blood.

24 Q In the area of semen?

25 A Several hundred.

4 for when you analyze blood?

5 A Basically, for blood, I am looking for an ABO  
6 type grouping, and I also might do an enzyme grouping,  
7 particularly, PGM typing.

8 Q What do you mean by "an ABO type grouping"?

9 A A person's bloodtype may be a Type A, Type B,  
10 Type AB, or Type O, and I will determine that using the  
11 blood sample.

12 Q Would you tell us what you mean by "PGM"?

13 A "PGM" is an enzyme found in blood. It can be  
14 found in vaginal secretions also or semen you can also get  
15 a PGM typing from. The population consists of: You could  
16 be a PGM Type 1, a PGM Type 2-1, or PGM Type 2, and I  
17 would be able to determine that.

18 Q Okay. Could you tell us what you are looking  
19 for when you examine semen?

20 A Just semen? Well, I usually am not examining  
21 semen; I am examining pieces of evidence for the presence  
22 of semen or the presence of spermatozoa. For that, I will  
23 also try to get a grouping on that.

24 Q What is "semen"?

25 A "Semen" consists of spermatozoa which is the

4 A "Saliva," I use that to determine whether a per-  
5 son is a secretor or a nonsecretor; and if they are a se-  
6 cretor, I try to determine their ABO type from the saliva  
7 sample.

8 Q Would you tell us what a "secretor" is?

9 A A "secretor" is a person whose ABO blood group,  
10 specific substances, can be determined from body fluids  
11 such as vaginal fluids or semen.

12 Q And do you know what percentage of the popula-  
13 tion are secretors or nonsecretors?

14 A Approximately eighty percent are secretors.

15 Q All right. So, twenty percent would be nonse-  
16 cretors?

17 A Nonsecretors.

18 Q Can you determine from your analysis of blood an  
19 individual's race?

20 A No.

21 Q Can you tell us, if you would, the percentage of  
22 the population in the individual ABO groups?

23 A For mixed or black population?

24 Q Okay. Would you tell us both, for the black  
25 population and for mixed population, and tell us what you

4       A       I don't commit those to memory. For "mixed  
5 population," I am looking at a population which is made up  
6 of white individuals and black individuals. It's just a  
7 combination of the mixed population. For the different  
8 ABO types, an A individual consists of approximately forty  
9 percent of the population; an O type person is forty-five  
10 percent of the population; a B type is approximately ten  
11 percent; and an AB is approximately five percent.

12       Q       And for the black population, do you have those  
13 percentages?

14       A       Yes. For the black population, Type O is ap-  
15 proximately twenty-eight percent; Type B is approximately  
16 eighteen percent; Type A is approximately fifty percent;  
17 and Type AB is approximately four percent.

18       Q       Could you tell us the percentages of the popula-  
19 tion for the PGM groups?

20       A       For a black individual, PGM Type 1 is approxi-  
21 mately sixty-four percent.

22       Q       Okay. When you give us those --

23       A       Do you want all three types?

24       Q       I am sorry. Do you have them?

25       A       Yes.

4 for a black population.

5 Q When you are giving us these percentages --

6 THE COURT: Excuse me. Mr. Chalu, approach the  
7 bench, please.

8 [Discussion off the record.]

9 THE COURT: I am sorry. Go ahead, ma'am.

10 MS. ALLEN: Thank you, Your Honor.

11 BY MS. ALLEN:

12 Q When you are giving us these percentages, does  
13 that include both male and female?

14 A Yes, it does.

15 Q So, we could divide those in half if we wanted  
16 to look at males, approximately in half?

17 A Approximately in half.

18 MS. ALLEN: Your Honor, at this time I would  
19 offer this witness as an expert in the area of  
20 serology.

21 THE COURT: Any objection or questions?

22 MR. CHALU: No objection or questions.

23 THE COURT: Mr. James?

24 DEFENDANT JAMES: No, sir.

25 THE COURT: The Court does declare she is an ex-

4 dence submitted to you by the Hillsborough County

5 Sheriff's Office by Detective Bill Davis in this case?

6 A Yes, I did.

7 Q Okay. What evidence did you receive in this  
8 case and when did you receive it?

9 A There was quite a few exhibits, so I will read  
10 from my notes. I received the following exhibits from  
11 Detective Davis on October 29, 1981:

12 A liquid blood sample from Corlanzo James; a  
13 liquid blood sample from Douglas James; a liquid blood  
14 sample from Allen Crotzer; saliva sample from Corlanzo  
15 James; an envelope identified as containing head hair from  
16 Corlanzo James; one envelope identified as containing pu-  
17 blic hair from Corlanzo James; a saliva sample from the  
18 suspect, Douglas James; one envelope identified as con-  
19 taining head hair from Douglas James; one envelope identi-  
20 fied as containing public hair from Douglas James; saliva  
21 sample from Allen Crotzer; one envelope identified as con-  
22 taining head hair from Allen Crotzer; one envelope identi-  
23 fied as containing public hair from Allen Crotzer; one  
24 Manila envelope identified as containing victims' and sus-  
25 pects' fingerprints; one shirt; one pair of shoes; one

4 as coming from Dawn Guggenheim with the following items:  
5 two vaginal swabs, two vaginal smear slides, one envelope  
6 identified as debris, one Manila envelope identified as  
7 known head hair, one Manila envelope identified as known  
8 public hair, and one Manila envelope identified as public  
9 hair combings.

10 I also received one t-shirt, one pair of shorts,  
11 one pair of panties identified as those of Dawn Guggen-  
12 helm, two ties.

13 I received another sexual battery examination  
14 kit identified as coming from the victim, Susan Marini,  
15 which contained two saliva swabs, two vaginal swabs, two  
16 vaginal slides, one Manila envelope identified as contain-  
17 ing known head hair, one Manila envelope containing known  
18 public hair, one Manila envelope identified as containing  
19 public hair combings.

20 In addition, I received clothes identified as  
21 coming from Susan Marini: one t-shirt, one blouse, one  
22 skirt, one slip, one pair of panties, one bra, one pair of  
23 shoes.

24 In addition, I received a toolbox with miscel-  
25 laneous tools, two floormats, one paper bag identified as



4 Q A funnel?

5 A A funnel and fan belts. One vinyl bag contain-  
6 ing the following items: One t-shirt, another t-shirt,  
7 one pair of socks, one shirt, one black comb, three cotton  
8 balls, one quarter, one plastic bag, and that was all that  
9 was in the vinyl bag.

10 In addition, I received one ashtray, one  
11 cigarette butt, and one paper bag identified as containing  
12 a soil sample.

13 Q Thank you. Upon receipt, let me ask you this.  
14 Did you later receive another submission concerning this  
15 case?

16 A Yes, I did.

17 Q What was that submission?

18 A Submission Number Two was identified on March 23  
19 by Detective Bill Davis, and it included a liquid, two  
20 liquid blood samples from Susan Marini and a saliva sample  
21 from Susan Marini.

22 Q Upon receipt of this evidence, what did you  
23 first do with it? Let me ask you this. Did you have oc-  
24 casion to examine all of this evidence?

25 A No, I did not examine all the evidence.

4 sweepings off it, and that was forwarded to micro, and I  
5 also did some exams on other items and then forwarded  
6 those to the latent section.

7 Q The items, would you tell us, please, what you  
8 mean by "sweepings"?

9 A I sweep the clothes, in particular, for hair or  
10 fibers. In this case it was for hair.

11 Q Okay. Did you sweep anything else other than  
12 the clothes in this case?

13 A Yes, I did. I also swept the toolbox with the  
14 tools in it, the floormats and the contents of the black  
15 vinyl bag.

16 Q Okay. The debris that you gathered from the  
17 sweepings, what did you do with that debris?

18 A They were packaged and sealed, and I turned them  
19 over to our evidence technician who will transport them to  
20 the lab, this other lab.

21 Q You yourself packaged and sealed those items?

22 A Yes, I do.

23 Q And you date and initial them?

24 A Yes. They are not dated. They are with our  
25 case number and my initials on them and the exhibit num-

4 Q Okay. That debris or those packages of debris  
5 along with the hair, items of hair in this case, do you  
6 know what was done with those items?

7 A They were transferred to the Sanford Regional  
8 Crime Laboratory.

9 Q You had nothing more to do with that, did you?

10 A No, I did not.

11 Q Calling your attention to the liquid blood sam-  
12 ples which you have previously mentioned, did you perform  
13 any tests or examinations on those samples?

14 A Yes, I did.

15 Q And what was the purpose of your testing those  
16 samples?

17 A For the blood samples, I tried to determine or I  
18 determined the ABO type and the PGM type and the secretor  
19 status, if possible.

20 Q Okay. Did you examine the liquid blood sample  
21 of the suspect, Corlanzo James?

22 A Yes, I did.

23 Q And what were the results of that examination?

24 A Corlanzo James --

25 THE COURT: Just a minute. If you would please

4 suspect, Douglas James?

5 A Yes, I did.

6 Q And what were the results of that examination?

7 A I found the liquid blood sample to be ABO Type  
8 O, PGM Type 2-1, and the saliva, a nonsecretor.

9 Q And did you examine the liquid blood sample of  
10 the suspect named Allen Crotzer?

11 A Yes, I did.

12 Q What was the result of that examination?

13 A For the blood sample only? For the blood sam-  
14 ple, I found him to be ABO Type O and PGM Type 1.

15 Q Were you able to determine his secretor or non-  
16 secretor status?

17 A Not from the blood sample. But from the saliva  
18 sample, I determined that he was a secretor, an O secre-  
19 tor.

20 Q Would you explain to us why you couldn't do that  
21 from the blood?

22 A Certain individuals you cannot determine their  
23 secretor status from the blood, so you need to use a  
24 saliva sample to determine this.

25 Q Did you examine the known blood sample and

Saliva sample shows A Crotzer: secretor  
(R 374) Type O  
PGM 1

S. Marini secretor  
(R 375) Type O  
PGM 1

374

4 A Susan Marini was ABO Type O secretor, PGM Type  
5 1.

6 Q Is that the same ABO type and PGM and secretor  
7 as the suspect, Allen Crotzer, in this case?

8 A Yes, it is.

9 Q Did you have occasion to examine any of the  
10 clothing of the victim, Susan Marini?

11 A Yes, I did.

12 Q What items did you examine and, if you would,  
13 just tell us what you examined and what your results  
14 were?

15 A Okay. For just her clothes alone, the panties  
16 that I examined, identified as Susan Marini's, I found the  
17 presence of spermatozoa. I did groupings on this, and I  
18 found the presence of blood group substance O and PGM Type  
19 1 on her panties.

20 Do you want all the exhibits that I looked at  
21 also for her?

22 Q Yes.

23 A On the stains on the skirt, I found the presence  
24 of spermatozoa but I was not able to determine the ABO  
25 typing from that, from those stains.

4 Q What else did you examine? Let me ask you this.  
5 Did you examine other items of clothing with negative re-  
6 sults?

7 A Yes, I did. I have negative results on the rest  
8 of the clothing items.

9 Q Okay. Did you have occasion to examine the  
10 vaginal swabs and the vaginal slides identified as coming  
11 from Susan Marini?

12 A Yes, I did.

13 Q And what were the results of that examination?

14 A The vaginal swabs demonstrated the presence of  
15 spermatozoa. The grouping on these showed ABO Type O and  
16 PGM Type 1. The vaginal smears demonstrated the presence  
17 of spermatozoa.

18 Q And did you also have occasion to examine the  
19 vaginal swabs and smears from Dawn Guggenheim?

20 A Yes, I did. Yes, I did.

21 Q And what were the results of that examination?

22 A The swabs failed to give chemical indications  
23 for the presence of semen, and I could not find any  
24 spermatozoa present on the slides.

25 Q That is for Dawn?

4 swabs, slides and clothing?

5 A Well, the presence of semen or spermatozoa is a  
6 male reproductive cell and could not have been deposited  
7 by a female, so there was a male perpetrator.

8 Q And can you tell us what type of individual,  
9 meaning what blood, PGM type of individual, could have de-  
10 posited the semen on the vaginal swabs of Susan Marini?

11 A That could have been -- that smear of the swabs  
12 that I got the groupings off of could have been from a  
13 person who was an O secretor, PGM Type 1, or could have  
14 been from any nonsecretor.

15 Q Is that ABO Type O, PGM 1, the type that you de-  
16 termined the defendant, Crotzer, to be?

17 A Yes, it is.

18 MS. ALLEN: I have no further questions of this  
19 witness, Your Honor.

20 THE COURT: Mr. Perry, you may inquire, or Mr.  
21 Chalu.

22 MR. CHALU: Thank you, Your Honor.

23 CROSS-EXAMINATION

24 BY MR. CHALU:

25 Q Mrs. Wilbarger, how are you today?

3 which you took from Mrs. Marini, I believe you stated that  
4 it indicated the presence of spermatozoa; is that cor-  
5 rect?

6 A That's correct.

7 Q All right. Now, I believe also you stated on  
8 direct examination that what distinguishes a person who is  
9 a secretor from a nonsecretor is that a person who is a  
10 secretor, you can find evidence of his blood or his blood  
11 type in fluids other than just his blood; is that right?

12 A That's right.

13 Q Whereas, in a nonsecretor, you cannot find evi-  
14 dence of blood type or PGM type in anything except the  
15 blood?

16 A For a nonsecretor?

17 Q Yes, ma'am.

18 A For a nonsecretor, I cannot find in the presence  
19 of the blood groupings specific substance for ABO typing.

20 Q Other than the blood itself?

21 A For other than blood.

22 Q All right. Now, I believe you stated that on  
23 the swab, you found the presence of blood group ABO Type  
24 O. You found a PGM Type 1, and you found that Mrs. Marini  
25 was a secretor; is that correct?



5 just blood?

6 A That's correct.

7 Q All right. Would it be fair to state, then,  
8 that the presence of the ABO blood type in Mrs. Marini's  
9 swab could have come from Mrs. Marini?

10 A Yes, her vaginal secretions. Yes, it's pos-  
11 sible.

12 Q So, it doesn't necessarily follow that the ABO  
13 blood type that was found in Mrs. Marini's swabs came from  
14 the contributor; it could have come from Mrs. Marini?

15 A It could have, yes.

16 Q Okay. Or, in fact, the spermatozoa present on  
17 the swab of Mrs. Marini could have come from a nonsecretor  
18 of any blood type?

19 A That's correct.

20 Q All right. So, if a nonsecretor was the one who  
21 had sexual intercourse with Mrs. Marini resulting in the  
22 presence of sperm on the swab, it could have been a person  
23 of any blood type that did the sexual battery, provided  
24 that that person was a nonsecretor?

25 A Could you restate that question, please?

4 A Yes.

5 Q -- Is it possible that a person of any blood  
6 type could have done or been the depositor or contributor  
7 of that sperm, provided they were a nonsecretor?

8 A Yes, that's possible.

9 Q So, within the bounds of reasonable scientific  
10 certainty, ma'am, is it fair to say that we cannot say who  
11 the depositor was of the sperm which appeared on the swab  
12 of Susan Marini?

13 A I can only say it was either from a nonsecretor  
14 or a person of ABO Type O secretor, PGM Type 1.

15 Q And approximately what percentage of the general  
16 population would either be a nonsecretor or ABO Type O,  
17 PGM Type 1 secretor?

18 A I figured that out. You are referring to a  
19 black population or a mixed population?

20 Q A black population.

21 A Okay. For a black population, I determine this  
22 by using whether it was a nonsecretor or an O secretor,  
23 PGM Type 1. I found approximately 38.4 percent of the  
24 total population.

25 Q All right. And that is of the total popula-

3 it by two men.  
4 Q So, we are talking about a fairly good per-  
5 centage of suspects that could have been a contributor  
6 here as far as the sperm on the swab of Mrs. Marini is  
7 concerned?

8 A Yes, approximately nineteen percent.

9 Q So, within the bounds of reasonable scientific  
10 certainty, ma'am, we cannot say that my client, Allen  
11 Jerome Crotzer, on the basis of this test, had any sexual  
12 intercourse with Mrs. Marini?

13 A I cannot say that he did. I can only say he  
14 fits into the group that could have perpetrated Susan  
15 Marini.

16 Q And that group is fairly large as you have al-  
17 ready stated?

18 A Approximately nineteen percent.

19 Q All right. Ma'am, concerning Dawn Guggenheim,  
20 you did have occasion to examine swabs taken from her; is  
21 that correct?

22 A That's correct.

23 Q All right. And the results of those were nega-  
24 tive?

25 A That's correct.

4 that was negative on those swabs.

5 Q All right. Would that indicate that she had not  
6 had sexual intercourse?

7 A No. It would indicate that I didn't find the  
8 presence of semen.

9 Q All right. Did you take a blood sample from  
10 Dawn?

11 A I don't believe I received a blood sample from  
12 her, no.

13 Q Did you take a saliva sample?

14 A Let me check my notes and make sure.

15 Q Sure. Go ahead.

16 A No, I did not receive a blood or saliva sample  
17 from her.

18 Q So, we don't know what Dawn Guggenheim's blood  
19 type is --

20 A No, we do not.

21 Q -- or her PGM --

22 A No, we do not.

23 Q -- or whether she is a secretor or nonsecretor?

24 A No.

25 Q And you found no semen on Dawn Guggenheim's

4 THE COURT: Any questions, Mr. James?

5 DEFENDANT JAMES: Yes, sir, I got one.

6 CROSS-EXAMINATION

7 BY DEFENDANT JAMES:

8 Q Mrs. Wilbarger?

9 A Wilbarger.

10 Q Ma'am, is it possible for you to detect urine?

11 A Urine?

12 Q Yes.

13 A We do not do a test of that sort, no.

14 Q Is it possible?

15 A For our laboratory, no, I do not know of a test  
16 for determining, per se, the presence of urine.

17 DEFENDANT JAMES: Okay. Okay. Thank you.

18 That's all.

19 THE COURT: Mr. Sinardi or Ms. Allen?

20 MS. ALLEN: One question, Your Honor.

21 REDIRECT EXAMINATION

22 BY MS. ALLEN:

23 Q The blood sample you examined for Douglas James  
24 indicates that he is a nonsecretor; is that correct?

25 A That's correct.

4 Let's take approximately a fifteen-minute recess.

5 [There was a short recess.]

6 THE COURT: All right. Your next witness,  
7 please, ma'am.

8 MR. SINARDI: Marianne Hildreth.

9 THE COURT: All right. If you would bring in  
10 the jury also.

11 [The jury returns to the courtroom.]

12 THE COURT: Would the clerk please swear in the  
13 witness.

14 MARIANNE HILDRETH,

15 being duly sworn, was examined and testified as follows:

16 DIRECT EXAMINATION

17 BY MS. ALLEN:

18 Q Would you state your name, please?

19 A My name is Marianne Hildreth.

20 Q What is your occupation?

21 A I am employed by the Florida Department of Law  
22 Enforcement at the Sanford Crime Laboratory as a micro-  
23 analyst.

24 Q Any specific area of microanalysis?

25 A I routinely perform examinations and comparisons