

1 that was sent to her in a large group.

2 THE COURT: This is just the ones that she  
3 handled in the bunch? It should have been done before.

4 We're going to take a recess, ladies and gentlemen,  
5 for ten minutes to get these exhibits in order. Once  
6 again I admonish you not to discuss the case among  
7 yourselves or with others and not to form an opinion  
8 until you've heard all of the evidence. Court will be in  
9 recess until the court reporter informs me that they're  
10 ready.

11 (Whereupon, a brief recess was taken from  
12 approximately 2:00 p.m. to 2:15 p.m.)

13 THE COURT: Do the parties stipulate that the  
14 jurors are all present?

15 MR. THAGGARD: So stipulated.

16 MR. MALTESE: So stipulated, Your Honor.

17 THE COURT: The record will so show. Go ahead.

18

19 Whereupon,

20 JULIE LONG,

21 called as a witness, having been first duly sworn, was  
22 examined and testified as follows:

23 DIRECT EXAMINATION

24 BY MR. THAGGARD:

25 Q Will you state your name for the Court, please?

1 A Julie Long.

2 Q What is your occupation?

3 A I'm employed as a forensic scientist particularly  
4 in the area of forensic serology at the Montana State  
5 Crime Lab which is located in Missoula.

6 Q And could you please tell us what serology is?

7 A Forensic serology is the typing and  
8 identification of blood and other body fluids mainly as  
9 they exist in stained form, and they are submitted to the  
10 Crime Laboratory by a law enforcement personnel from the  
11 state.

12 Q How long have you been involved in this  
13 occupation?

14 A I've been employed there from July of 1980  
15 through July of 1986, and then since February of 1988 to  
16 the present time. So a total of approximately eight  
17 years.

18 Q And what is your formal education in this field?

19 A I have a Bachelor of Science degree in  
20 microbiology from the University of Montana. I also have  
21 a diploma as a certified laboratory assistant from  
22 District 1 Technical Institute in O'Clare, Wisconsin. I  
23 have taken specialty classes, two classes from the FBI  
24 Academy in Quantico, Virginia, in blood stain analysis, a  
25 course also in blood stain analysis from the Serological

1 Research Institute, which is located in -- excuse me, now  
2 it's Richmond, California, previously in Emeryville,  
3 California, and I recently attended a semen analysis  
4 course there also.

5 Q Did you successfully complete these courses?

6 A Yes, I did.

7 Q And what experience do you have in this field?

8 A I have eight years, approximately eight years of  
9 working experience and then the formal education.

10 Q And have you performed blood analysis?

11 A Yes, I have.

12 Q Have you ever testified as an expert in court?

13 A Yes, I have.

14 Q And where have you testified, in what states?

15 A In Montana in District Court and Federal Court.

16 Q Do you belong to any professional organizations?

17 A Yes, I do. I'm a member of the American Society  
18 of Clinical Pathologists as a certified laboratory  
19 assistant. I'm a member of the Northwest Association of  
20 Forensic Scientists, and I'm also a member of the  
21 International Hemogenetics Society.

22 Q And have you performed any analysis on evidence  
23 in this case?

24 A Yes, I have.

25 Q I'm going to hand you a number of items and ask

1       you to identify them for us.

2               Did you have occasion to receive from  
3       Arnold Melnikoff in 1989 any of the evidence taken from  
4       Bergh, Kris Bergh?

5               A   Yes, I did.

6               Q   Okay. And what evidence was given to you by  
7       Mr. Melnikoff?

8               A   The sexual assault kit that was done at the  
9       hospital and clothing and bedding that was submitted.

10              Q   And when was that given to you?

11              A   On the 15th of February, 1989.

12              Q   And in the things you received on the 15th of  
13       February of 1989, I'm now handing you State's Exhibit 4.  
14       Can you identify that?

15              A   State's Exhibit 4 is a sexual assault kit. It's  
16       kit number is 2001. It's labeled with our case number  
17       assigned by the laboratory, which is 89-234, and it has  
18       my laboratory number and seal on it and signature.

19              Q   And I'm handing you State's Exhibit No. 11, and  
20       can you identify that for us?

21              A   State's Exhibit 11 is a sealed, partially sealed  
22       paper sack which, again, has my seal and signature on it,  
23       and it's labeled as being sheets.

24              Q   I'm now handing you State's Exhibit 8. Can you  
25       identify that for us?

1           A   State's Exhibit 8, again, is a sealed paper sack  
2   with my seal and signature on it, and it's labeled as  
3   women's panties. Their exhibit number is number 10 from  
4   the case and State's Exhibit No. 8.

5           Q   And I'm now handing you State's Exhibit No. 16.  
6   Can you identify that for us?

7           A   Exhibit No. 16 is a sealed paper sack labeled as  
8   vacuumings from the bedroom.

9           Q   And I'm now handing you State's Exhibit 15. Can  
10   you identify that?

11          A   State's Exhibit 15, again, is a sealed paper sack  
12   with my seal and signature. It is labeled as a pillow  
13   case.

14          Q   I'm now handing you State's Exhibit 13. Can you  
15   identify that?

16          A   Number 13, again, is a sealed paper sack with my  
17   seal and signature labeled as a toothpick, bedroom floor,  
18   south of bed.

19          Q   I'm now handing you State's Exhibit 14. Can you  
20   identify that?

21          A   Number 14 is a sealed paper sack with my seal and  
22   signature. It's labeled as dark blue panties.

23          Q   I'm now handing you State's Exhibit 17. Can you  
24   identify that for us?

25          A   State's Exhibit 17 is a sealed paper sack with my

1 seal and signature, and it is the pillow case from the  
2 bed.

3 Q I'm now handing you State's Exhibit 5. Can you  
4 identify that?

5 A Number 5, again, is a sealed paper sack labeled  
6 as vacuum, bathroom.

7 Q I'm now handing you State's Exhibit 7. Can you  
8 identify that?

9 A State's Exhibit 7 is a slide box containing  
10 microscope slides prepared by Mr. Melnikoff labeled as  
11 Richland County Sheriff's Office Case 89-234.

12 Q I'm now handing you what's marked as State's  
13 Exhibit 18. Can you identify that?

14 A Exhibit 18 is a sealed letter envelope which has  
15 my writing on it, 89-234, panties, number 10.

16 Q I'm now handing you State's Exhibit 19. Can you  
17 identify that?

18 A Number 19, again, is a white letter envelope with  
19 my writing on it, hair from pillow case, number 6.

20 Q And I'm now handing you State's Exhibit 20. Can  
21 you identify that?

22 A Number 20 is a white letter envelope again with  
23 my writing on it, 89-234, hair from pillow case, number  
24 7.

25 Q Were these received on the same date?

1 A Yes.

2 Q And what date would that be?

3 A They were received into the laboratory on the  
4 10th of February, 1989.

5 Q Okay. And then what was done with them?

6 A Then they were signed over to myself.

7 Q And when they were signed over to you, were they  
8 sealed?

9 A Yes.

10 Q And what did you do with them?

11 A I opened up the sexual assault kit, and performed  
12 the needed analysis, and also proceeded to open up the  
13 rest of the items and examine them for significant  
14 evidence.

15 Q What did you do when you were done analyzing  
16 these items?

17 A The items were resealed. Items that were  
18 specifically just for apparent fiber comparison were  
19 assigned to Mr. Melnikoff.

20 Q And were any of those items ever returned to you?

21 A Yes, they were.

22 Q And which items would those have been?

23 A Those would have been the vacuumings, and the  
24 white envelopes which contained the hair that I removed  
25 from the items that I looked at myself.

1 Q And were those subsequently returned to you?

2 A Yes.

3 Q And when were they returned to you?

4 A On July 26th of 1989.

5 Q And were they sealed at that time?

6 A Yes, they were.

7 Q And what did you do with them then?

8 A I assigned them to -- I assigned the sealed  
9 evidence over to Laurie Moffit, the evidence technician,  
10 and she returned them to the Sidney Police Department via  
11 UPS.

12 Q And were those received?

13 A Yes, they were.

14 Q And are your seals on all of these items?

15 A Except for the vacuumings, yes, they are.

16 Q And those seals on the vacuumings belong to?

17 A Mr. Melnikoff.

18 Q Okay. And have any of these seals been broken,  
19 your seals?

20 A No.

21 MR. THAGGARD: Your Honor, I move to fully  
22 admit all of these items. I'll read them off for the  
23 record.

24 THE COURT: Is there any objection?

25 MR. MALTESE: Foundation.



1 MR. THAGGARD: Your Honor, we've shown our  
2 chain of custody.

3 THE COURT: Well, you don't have to respond.  
4 Exhibits 4, 5, 7, 8, 11, 13, 14, 15, 16, 17, 18, 19 and  
5 20 will be admitted.

6 MR. THAGGARD: Thank you, Your Honor.

7 Q Miss Long, was any other evidence submitted to  
8 you in this case?

9 A Yes, it was.

10 Q And what was submitted to you?

11 A A standards kit, or sexual assault kit,  
12 containing standards from Mr. Paul Kordonowy.

13 Q Okay. And I'm now handing you what is marked as  
14 State's Exhibit 24. Can you identify that for us?

15 A Exhibit 24, again, is a sexual assault kit. The  
16 number is 2067, labeled as coming from Paul Kordonowy,  
17 and it contains the seal from the State Crime Lab.

18 Q When did you receive that?

19 A That was received into the laboratory on January  
20 30th, 1989.

21 Q And who received it?

22 A Laurie Moffit.

23 Q And then what was done with it?

24 A It was signed to myself.

25 Q Was it sealed when it was given to you?

1 A Yes, it was.

2 Q And what did you do with it?

3 A Ah, that evidence -- the kit was opened and I  
4 analyzed the evidence that was pertinent to serology.

5 Q And then what did you do?

6 A The kit was signed to Mr. Melnikoff for hair and  
7 fiber comparison.

8 Q And then what was done with the kit?

9 A He signed it back to myself.

10 Q On what date?

11 A On April 11th, 1989.

12 Q And what did you do with it?

13 A I returned it to the Sidney Police Department on  
14 June 30th, 1989.

15 Q And did you seal it before you returned it?

16 A Mr. Melnikoff sealed it after he -- I sealed it  
17 when I gave it to Mr. Melnikoff, and then he sealed it  
18 when he was finished with the hair comparison.

19 Q Did he then hand it back to you?

20 A Yes.

21 Q And was his seal on it at that time?

22 A Yes, it was.

23 Q Is his seal on it now?

24 A Yes, it is.

25 MR. THAGGARD: Your Honor, I move to admit

1 State's Exhibit 24.

2 THE COURT: Any objection.

3 MR. MALTESE: Same objection.

4 THE COURT: It'll be admitted.

5 Q I'm now handing you what is marked as State's  
6 Exhibit 25. Can you identify that for us?

7 A Exhibit No. 25, again, is a sexual assault kit,  
8 evidence kit number 3180, labeled as coming from  
9 Lynn Lohse, and it contains my seal and signature.

10 Q And when was that received?

11 A That was received on October 5th, 1989.

12 Q And who received it?

13 A Laurie Moffit.

14 Q And then what was done with it?

15 A It was signed to Mr. Charles Baker.

16 Q And who is that?

17 A He is the other serologist in the laboratory.

18 Q And then what was done?

19 A He signed it to me.

20 Q And when you received it, was it sealed?

21 A Yes, it was.

22 Q Okay. And what did you do with it?

23 A I again analyzed the serological evidence.

24 Q And then what was done with it?

25 A The kit was resealed, and I signed it to

1 Laurie Moffit, and she returned it.

2 Q And is your seal present on this now?

3 A Yes, it is.

4 MR. THAGGARD: Your Honor, I move for admission  
5 of State's Exhibit 25.

6 THE COURT: Any objection?

7 MR. MALTESE: Foundation.

8 THE COURT: Did Mr. Baker do anything with it?

9 THE WITNESS: No, he did not.

10 THE COURT: It'll be admitted.

11 Q I'm now handing you what is marked as State's  
12 Exhibit No. 9. Can you identify that for us?

13 A State's Exhibit No. 9 is a sealed envelope, step  
14 number 7, which is a saliva sample, labeled as coming  
15 from Krisin Bergh, and it contains my initials and seal  
16 and the case number 89-234.

17 Q When was this received by the Crime Lab?

18 A On the 17th of March, 1989.

19 Q And who received it?

20 A Mr. Jim Hutchison.

21 Q And did he do any work on it?

22 A No, he did not.

23 Q And then what was done with it?

24 A It was signed to myself.

25 Q And was it sealed at that point?

1 A Yes, it was.

2 Q And what did you do with it?

3 A I analyzed it through our normal procedure, and  
4 then it was signed to Laurie Moffit to return to the  
5 Sidney Police Department.

6 Q And did you seal it?

7 A Yes, I did.

8 Q Is your seal still on this?

9 A Yes, it is.

10 Q And has it been broken?

11 A No, it hasn't.

12 MR. THAGGARD: Your Honor, I move for admission  
13 of State's Exhibit No. 9.

14 THE COURT: Any objection?

15 MR. MALTESE: Foundation.

16 THE COURT: It'll be admitted.

17 Q I'm now handing you what's marked as State's  
18 Exhibit No. 10. Will you identify that for us?

19 A State's Exhibit No. 10 is a white envelope with  
20 orange lettering, step ten, whole blood sample. It's  
21 labeled as coming from Kristin Bergh, and it contains --  
22 it's sealed with the Montana State Crime Lab evidence  
23 tape and my signature.

24 Q And when was that received?

25 A That was also received on the 17th of March,

1 1989.

2 Q And who was it received by?

3 A Mr. Jim Hutchison.

4 Q Did he perform any work on it?

5 A No, he did not.

6 Q Then what was done with it?

7 A It was signed to me, and I did the blood typing  
8 on it, and sealed it, and returned it to Laurie Moffit to  
9 return to the Police Department.

10 Q Is it now sealed with your seal?

11 A Yes, it is.

12 MR. THAGGARD: Your Honor, I move for admission  
13 of State's Exhibit 10.

14 THE COURT: Any objection?

15 MR. MALTESE: Foundation.

16 THE COURT: It'll be admitted.

17 Q Did you have occasion to analyze the vaginal  
18 samples of Kristin Bergh?

19 A Yes, I did.

20 Q And what did that analysis entail?

21 A In an alleged sexual assault case we receive the  
22 sexual assault kit from the investigating agency and then  
23 we attempt to determine if there is seminal fluid present  
24 in the samples that are submitted. In this case there  
25 were vaginal samples, oral samples and rectal samples.

1           And there are different parameters that we're  
2 looking for when we are trying to determine if there's  
3 seminal fluid present.

4           One of the parameters is acid phosphatase. That is  
5 an enzyme that is found in semen. It is also found in  
6 vaginal fluid. But the level is so high in semen that  
7 when we get a numerical value we can say, yes, this value  
8 is the seminal level of the enzyme present.

9           We also, obviously, look for sperm because sperm are  
10 only found in seminal fluid.

11          Another parameter that we do occasionally look for  
12 is P30. P30 is a protein. It is produced by the  
13 prostate gland, and so it is another specific test for  
14 seminal fluid.

15          Q And what did your analysis of Kristin Bergh's  
16 vaginal sample reveal?

17          A There was seminal fluid found in the vaginal  
18 samples.

19          Q And can you explain to us what that seminal fluid  
20 revealed?

21          A That she had had recent intercourse, "recent"  
22 meaning within three days of when she had the examination  
23 taken.

24          Q And did you type Kristin Bergh's blood?

25          A Yes, I did.

1 Q And what is her blood type?

2 A Her blood type is ABO type O.

3 Q And what did you type the defendant's blood?

4 A He is also ABO type O.

5 Q Okay. And what is an H secretor?

6 A In a case involving sexual assault where you're  
7 going to have body fluids present and not necessarily  
8 blood, it's important that we determine the secretor  
9 status of the individuals involved. That means  
10 approximately eighty percent of the population secrete  
11 their blood type substances in their body fluids.

12 For example, if your ABO type is A and you are a  
13 secretor then, if you're female, in your vaginal fluid,  
14 in your saliva, in your sweat, you are secreting A  
15 Substance. You also secrete H Substance. H Substance is  
16 just the basic sugar that the A and the B blood types are  
17 made from in your body.

18 If you are an ABO type O, then you secrete the H  
19 Substance. If you are type B, then you secrete the B  
20 Substance. And so if you are a male, then in your  
21 seminal fluid, and in your saliva, and in your sweat, you  
22 are secreting your corresponding ABO type. So that is  
23 why it is important in an alleged sexual assault case to  
24 determine if the people are secretors.

25 Q Is Kristin Bergh a secretor?



1 A Yes, she is.

2 Q And is she an H secretor?

3 A Yes, she is.

4 Q Is the defendant, Paul Kordonowy, an H secretor?

5 A Yes, he is.

6 Q And when you examined the vaginal samples, were  
7 there H secretions present?

8 A Yes, there were.

9 Q Were there any other secretions present?

10 A Yes, A Substance was present.

11 Q The A secretion?

12 A Yes.

13 Q Now, who could be responsible for the presence of  
14 the H secretion in the vaginal sample?

15 A Kristin Bergh can be a source of the H Substance  
16 since she is an H secretor, and also a semen doner who is  
17 an H secretor is a possibility.

18 Q Could Paul Kordonowy be a source of the H  
19 secretion?

20 A He could be, yes.

21 Q Now, could Kristin Bergh be responsible for the A  
22 secretion?

23 A No, she could not.

24 Q Could Paul Kordonowy be responsible for the A  
25 secretion?

1           A   No, he couldn't.

2           Q   Did you type Lynn Lohse's blood type?

3           A   Yes, I did.

4           Q   And is Mr. Lohse a secretor?

5           A   Yes, he is.

6           Q   And what does he secrete?

7           A   He's an A secretor, so he secretes A Substance  
8   and H in his seminal fluid, and saliva, and sweat.

9           Q   Mr. Lohse had had sexual intercourse with  
10   Miss Bergh on July 23rd, 1987, two days prior to the  
11   taking of these vaginal samples on the morning of July  
12   25th. Could Mr. Lohse be responsible for the presence of  
13   the A secretion?

14          A   Yes, he could.

15          Q   Is there anything else that could be responsible  
16   for the presence of the A secretion?

17          A   Yes, in this case there was a large amount of  
18   bacteria, which I noted, and it has been reported that a  
19   large amount of bacteria can give you an A Substance  
20   reading in your analysis because your ABO substances are  
21   sugars, and bacteria also produce sugars.

22          Q   Based on your analysis of Bergh's blood, based on  
23   your analysis of Mr. Kordonowy's blood, based on your  
24   analysis of Lynn Lohse's blood, and based on your  
25   analysis of the vaginal sample, can Mr. Kordonowy be

1 excluded as the possible donor of the H secretion in  
2 Kristin Bergh's vaginal sample?

3 A No, he cannot be excluded.

4 Q Did you examine the panties taken from the bed?

5 A Yes, I did.

6 Q And what did that analysis entail?

7 A The item was opened, taken out of the sack and  
8 examined for possible semen stains that may be present.

9 Q Were any stains found?

10 A Is that number -- can you tell me which number  
11 that is?

12 Q That would be item number ten.

13 A Yes, I did find a seminal level of acid  
14 phosphotase in that pair of underwear.

15 Q And how high a level would that have been?

16 A I don't know the specific number here, but in our  
17 analysis it's just -- it's high enough that we could call  
18 it an seminal level -- a seminal level.

19 Q And did you analyze that semen, or that level?

20 A Yes, I did.

21 Q And what did that reveal?

22 A That revealed the presence of A Substance and H  
23 Substance.

24 Q Could Mr. Kordonowy be responsible for the H  
25 Substance?

1 A Yes, he could be.

2 Q Could Kris Bergh be responsible for the H  
3 Substance?

4 A Yes.

5 Q Did you examine the blue panties found in the  
6 kitchen, which would be item number nine?

7 A Yes, I did.

8 Q And what did that examination reveal?

9 A That item was examined in a similar fashion, and  
10 a semen stain was also found in panty number nine.

11 THE COURT: Now, you should, to make a record  
12 now, that's Exhibit 14, is it not?

13 MR. THAGGARD: Yes, Your Honor.

14 THE COURT: And then your prior testimony  
15 referred to Exhibit 8, I believe. Is that correct?

16 MR. THAGGARD: That's correct, Your Honor.

17 THE WITNESS: Okay.

18 THE COURT: Go ahead.

19 Q What did the analysis of Exhibit 14, the panties  
20 found in the kitchen, reveal?

21 A That there was a semen stain present.

22 Q And were there any secretions present in that  
23 semen stain?

24 A Yes, there were; A and H Substances were present.

25 Q Could Lynn Lohse have been responsible for the A

1 Substance?

2 A Yes, he could.

3 Q And could he have been responsible for the A  
4 secretion found in Exhibit No. 8, the panties found in  
5 the bed?

6 A Yes.

7 Q Can Paul Kordonowy be excluded as a possible  
8 donor of the H Substance found in Exhibit 14, the panties  
9 found in the kitchen?

10 A No.

11 MR. THAGGARD: No further questions, Your  
12 Honor.

13 THE COURT: Cross?

14 MR. THAGGARD: Thank you, Your Honor.

15 CROSS-EXAMINATION

16 BY MR. MALTESE:

17 Q Miss Long, you are an employee of the Montana  
18 Department of Justice?

19 A Yes, sir.

20 Q And you work with the State Lab, it has a formal  
21 name?

22 A Division of Forensic Science.

23 Q Okay. And you have testified before in a  
24 forensic capacity?

25 A Yes.

1 Q And how many times have you testified?

2 A Oh, approximately forty.

3 Q How many times have you testified for the State  
4 of Montana?

5 A It's all been for the State of Montana.

6 Q Now, as I understand it, you also -- you prepared  
7 a Physical Evidence Examination Report in connection with  
8 the analysis of the items of evidence that you examined?

9 A Yes.

10 Q And, as I understand your testimony, Lynn Lohse  
11 is ABO type A and a secretor?

12 A Yes, that's correct.

13 Q Now, ABO type refers to blood?

14 A Yes.

15 Q And secretor talks about certain type of  
16 characteristics of that -- character of blood?

17 A It refers to what you expect in the body fluids.

18 Q If you are an ABO Type A and a secretor, as  
19 Mr. Lohse is, and if you examine these evidence slides  
20 and whatnot that you examine, you could expect to see an  
21 A Substance and an H Substance in the evidence samples,  
22 isn't that correct?

23 A Yes.

24 Q And if Miss Bergh were ABO Type O and a secretor,  
25 you could expect to see an A Substance ----

1 A No.

2 Q --- in the seminal fluid? You could not expect  
3 to see the A Substance in the seminal fluid, is that  
4 correct?

5 A I'm confused. You were talking about ----

6 Q Okay. Let me start over again. Perhaps I can  
7 straighten it out.

8 Now, Miss Bergh has an ABO blood type?

9 A Yes.

10 Q Type O?

11 A Yes.

12 Q Mr. Kordonowy has an ABO blood type Type O?

13 A Yes.

14 Q And Mr. Lohse had a different blood type?

15 A Yes.

16 Q An ABO Type A?

17 A Yes.

18 Q Now, from a secretor's standpoint, an ABO  
19 Type O can be the source of an H Substance?

20 A Yes.

21 Q It cannot be the source of an A Substance?

22 A That's correct.

23 Q Now, when you examined these different specimens  
24 of evidence, if you would have found an A Substance  
25 located on any of them, and only an A Substance, not an H

1 Substance, for example, you can say with some source of  
2 precision that Mr. Kordonowy's seminal fluid probably  
3 could not be found on that piece of evidence, is that  
4 accurate?

5 A If there was just the A and no H?

6 Q Just an A alone.

7 A Yes.

8 Q If there was an A and an H Substance, you can't  
9 rule out the possibility that Mr. Kordonowy may have  
10 contributed the H Substance?

11 A That's correct.

12 Q On the other hand, you can also not rule out the  
13 H Substance may have come from Miss Bergh herself,  
14 Mr. Kordonowy, or Mr. Lohse. Each of those people could  
15 have had an H Substance or contributed an H Substance to  
16 the evidence sent, is that accurate?

17 A Yes, that's correct.

18 Q Now, the A Substance, as I understand it, could  
19 have also been present because of the action of bacteria  
20 on the sample.

21 A That's a possibility, yes.

22 Q And were you aware of when these samples were  
23 taken?

24 A I was when I did the examination, yes.

25 Q If I refreshed your memory and said that it was



1     sometime in 1987, July 25th of 1987, would that seem like  
2     a reasonable time that certain samples were gathered in  
3     connection with your analysis?

4             A   Yes, that's why I have a note in the report, is  
5     what was on top of the kits. I believe it was 7/25/87.

6             Q   Okay. And because of the lapse of time I think  
7     you testified that you received these samples some time  
8     in 1979 -- or '89, excuse me?

9             A   Yes, January.

10            Q   There was a possibility of bacteria which could  
11    have caused an A Substance to be present?

12            A   That's possible, yes.

13            Q   Had the samples been mailed to the State Lab  
14    earlier, before this bacteria came about, you might have  
15    been able to have a more precise analysis with respect to  
16    the A Substance?

17            A   Yes.

18            Q   Now, so there's no misunderstanding, when you  
19    examined these swabs and other items of evidence,  
20    Miss Long, you were looking for more than simply an A or  
21    an H Substance, weren't you? You were looking first of  
22    all for the presence of seminal fluids.

23            A   Yes, that's correct.

24            Q   And with respect to several of these items of  
25    evidence, you did find seminal fluid?

1           A   Yes, that's correct.

2           Q   And then, as I understand it, after you made the  
3   determination that there was seminal fluid, and I guess  
4   to clarify it, seminal fluid would be an emission from the  
5   male sex organ?

6           A   That's correct, yes.

7           Q   One of the components of seminal fluids would be  
8   sperm?

9           A   Yes, that's correct.

10          Q   And so then you would have looked at all these  
11   various items of clothing, bedsheets and whatever else,  
12   and seen if you could have detected sperm?

13          A   Yes.

14          Q   And, in fact, I see that you prepared a Physical  
15   Evidence Report, and you have prepared a little chart,  
16   and you described in the chart the various types of tests  
17   and things that you analyzed, and then in one column you  
18   put a description of whether or not any sperm was  
19   present.

20          A   That's correct.

21          Q   And, as I understand it, basically there was only  
22   one piece of clothing in which a few head of sperm were  
23   present.

24          A   That's correct.

25          Q   And I believe you also testified the sperm has a

1 life of, what, three days did you say? Or did you not  
2 say that?

3 A I didn't say that in my testimony at all.

4 Q Does it have a certain life?

5 A Sperm in the vaginal cavity?

6 Q No, not in the vaginal cavity, on something like  
7 a piece of clothing or something like that? In other  
8 words, in order to be able to detect sperm does there  
9 have to be an analysis within a specified period of time?

10 A Once the sperm are deposited on an item,  
11 depending on the conditions that that item is in, if  
12 there is -- if the items is, say, dried and particularly  
13 if it's dried, then sometimes the sperm can stay months,  
14 years. If the environment that the item is in is, say,  
15 moist there may be more bacterial action, and that  
16 bacterial action sometimes destroys the sperm that may be  
17 present. It just depends on what the environment that  
18 particular stained item is in.

19 Q In other words, if you took a sample from a, say,  
20 a pair of panties and sperm had been deposited on those  
21 panties, that could have been deposited several days or  
22 even maybe weeks before the examination?

23 A Yes.

24 Q So there's no way to determine with any degree of  
25 precision when that sperm would have been deposited on

1       that article of clothing?

2           A   No, there isn't.

3           Q   Now, I believe, then, your testimony with respect  
4       to three days related, perhaps, to the taking of swabs at  
5       the hospital, is that accurate?

6           A   Yes, I believe I said that seminal fluid, ah, the  
7       outside range for seminal fluid generally is -- it can  
8       remain up to three days in the vaginal cavity depending  
9       on the physical activity of the person, the amount of  
10      seminal fluid that's there to begin with. There are many  
11      factors that affect what you would find three days later.

12          Q   So, in other words, to the extent that there was  
13      seminal fluid located on any of these specimens or  
14      articles of clothing, if the victim had had sexual  
15      relations at any time within that three-day period of  
16      time, it could have come from that source.

17          A   Yes, that's correct.

18          Q   Now, my understanding is that you examined two  
19      vaginal swabs, a vaginal aspirate, an oral swab, a rectal  
20      swab and two different panties, is that correct?

21          A   Yes, that's correct.

22          Q   And with respect to all of these items, it was  
23      only in the panties that a few heads of sperm were  
24      identified.

25          A   That's correct, yes.

1 Q And there was none identified in the other ----

2 A No, there was not.

3 Q And in terms of the existence of seminal fluid,  
4 was there seminal fluid located on these various  
5 specimens?

6 A Yes, they were.

7 Q In all of them?

8 A In the vaginal aspirate, and a high level of a  
9 seminal enzyme in the two vaginal swabs.

10 Q Now, if there is a sample which shows seminal  
11 fluid and shows the presence of an A Substance and an A  
12 Substance alone, can we at that time rule out that  
13 Mr. Kordonowy's seminal fluid may be involved?

14 A On that one particular sample?

15 Q Yes.

16 A (The witness took several moments to answer.)  
17 Yes, I believe I can.

18 Q So, for example, in your analysis you show a  
19 vaginal swab that shows the presence of A but not the  
20 presence of H?

21 A That's correct, yes.

22 Q And in another, the vaginal aspirate, you show  
23 the presence of A, but you don't show the presence of H?

24 A That's correct, yes.

25 Q And, also, on your rectal you show the presence of

1 A, but you don't show the presence of H?

2 A Yes, that's correct.

3 Q So with respect to those three samples, then, we  
4 can rule out Mr. Kordonowy?

5 A For those particular samples, yes.

6 Q Yes. Then, with respect to the vaginal swab  
7 which shows the A and the H Substance, we cannot rule out  
8 Mr. Kordonowy because of the presence of the H Substance.

9 A That's correct, yes.

10 Q But we can also -- cannot rule out that the  
11 originator of that H Substance was Miss Bergh herself as  
12 an ABO Type O?

13 A That's correct, yes.

14 Q Or Mr. Lohse as an ABO Type A?

15 A That's correct.

16 Q And, likewise, in the examination of the two  
17 pairs of panties which show the substance of A and H,  
18 again, we cannot rule out Mr. Kordonowy but the H  
19 Substance could have been contributed by either Mr. Lohse  
20 or Miss Bergh herself?

21 A That's correct, yes.

22 Q Is it a fair statement, Miss Long, to conclude  
23 that the examinations and testing do not conclusively  
24 show that any semen detected from the samples can be  
25 traced to Mr. Kordonowy?

1 A Not conclusively, no.

2 Q And, in fact, all you can do, at least as to some  
3 of those samples, is rule out that he may have been a  
4 person that contributed?

5 A That's correct, yes.

6 MR. MALTESE: I have no further questions.

7 THE COURT: Redirect?

8 REDIRECT EXAMINATION

9 BY MR. THAGGARD:

10 Q What percentage of the population secretes the  
11 Substance A?

12 A I'm sorry, A?

13 Q Yes.

14 (Whereupon, the witness computed the percentage  
15 on her calculator.)

16 A Approximately twenty-six.

17 Q What percentage secretes the H Substance?

18 (Whereupon, the witness computed the percentage  
19 on her calculator.)

20 A Approximately twenty-nine.

21 Q Now, could Lynn Lohse have contributed any of the  
22 H samples present in the panties, Exhibits 8 and 14, or  
23 in the vaginal swabs contained in the rape kit?

24 A The H?

25 Q Yes.

1 A Yes, he could.

2 Q Could Lynn Lohse?

3 A He could contribute the H. A person who is an A  
4 secretor can contribute A or H. A person who is a B  
5 secretor can contribute B or H. And an O secretor  
6 secretes H.

7 Q Did any of the vaginal samples, or vaginal swabs,  
8 contain H sample?

9 A Yes, they did.

10 Q Okay. And did State's Exhibit 8, the panties  
11 from the bedroom, contain H sample?

12 A Yes, it did.

13 Q And did State's Exhibit 14, the panties from the  
14 kitchen, contain the H Substance?

15 A Yes, it did.

16 Q And can Mr. Kordonowy be excluded as the doner of  
17 the H substance in any of those exhibits?

18 A No, he can't.

19 MR. THAGGARD: Thank you, Your Honor. I have  
20 no further questions.

21 THE COURT: Recross?

22 MR. MALTESE: Just one question.

23 RECROSS-EXAMINATION

24 BY MR. MALTESE:

25 Q I believe you stated that twenty-nine percent of



1 all humans secrete H?

2 A The figures are United States population, yes.

3 Q United States population?

4 A Yes, not world population.

5 Q So then twenty-nine percent of the population of  
6 the United States of America could possibly secrete H?

7 A Yes.

8 Q And again, just to reiterate, all of the  
9 principals, Mr. Lohse, Miss Bergh and Mr. Kordonowy,  
10 would secrete H?

11 A Yes.

12 Q And, therefore, they would be within that  
13 twenty-nine percent of the population?

14 A Mr. Lohse would not be -- the figure of  
15 twenty-nine percent is for someone who is an ABO Type O  
16 and who is a secretor. Mr. Lohse, because he is an A  
17 secretor, it's possible that he's secreting H Substance,  
18 which he was in his saliva sample that I found. But the  
19 twenty-nine percent figure is who is a blood type O and a  
20 secretor.

21 Q Okay. So, in other words, anybody that has an  
22 ABO, O blood type there's a twenty-nine percent  
23 possibility that they would be secretors?

24 A Yes, that's correct.

25 Q Thank you.

1 THE COURT: Is this witness released from her  
2 subpoena?

3 MR. THAGGARD: Yes, Your Honor.

4 THE COURT: You're free to go.

5 THE WITNESS: Thank you.

6 MR. THAGGARD: Thank you, Mrs. Long.

7 THE COURT: You may leave or stay.

8 THE WITNESS: I'll leave, thank you.

9 THE COURT: Okay.

10 MR. THAGGARD: Your Honor, at this point the  
11 State rests.

12 THE COURT: Mr. Maltese?

13 MR. MALTESE: Thank you, Your Honor.

14

15

#### OPENING STATEMENT

16 BY MR. MALTESE:

17 Ladies and gentlemen of the jury, the State has had  
18 it's opportunity to present it's case, and I hope that  
19 all of you remember that the case isn't concluded until  
20 everyone has had an opportunity to present evidence to  
21 this Court.

22 In our procedure I have an opportunity, here, to  
23 give you an overview of the type of evidence that we have  
24 an opportunity to present at this time.

25 Now, my client, Mr. Kordonowy, is going to avail