

## **Charles, Ulysses**

Testimony of

Stanley Bogdan, TT 7-23 to 7-45 (pages 2 to 24)

John Cope Abbott, TT 7-45 to 7-53 (pages 24 to 32)

1           STANLEY BOGDAN, Sworn

2           Direct Examination by Mr. Campo:

3       Q     Please state your name?

4       A     Stanley, middle initial I, Bogdan. That's B-o-g-d-a-n.

5       Q     By whom are you employed?

6       A     By the Boston Police Department.

7       Q     In what capacity are you employed?

8       A     As a senior criminalist in the Crime Laboratory.

9       Q     Would you tell us what your educational background is  
10           that qualifies you to be a senior criminalist?

11      A     I have a Bachelor of Science degree from the College of  
12           the City of New York. I have graduate study --

13      Q     What do you have your Bachelor of Science degree in?

14      A     Physics. I have graduate study in physics at the  
15           Polytechnic Institute of Brooklyn. In addition to  
16           working for many years in a laboratory as performing  
17           analysis by instrumental methods, I had occasion to  
18           learn a great deal of chemistry on the job during those  
19           years.

20                   When I came to the Boston Police Crime Lab  
21           I had additional opportunity to learn chemical techniques  
22           by my own reading, from others on the job, also by  
23           taking courses at the F.B.I. Academy.

24      Q     Would you tell us what courses you took at the F.B.I.  
25           Academy when you went there?

1 A I took three courses at the academy at different times.  
2 One was a course on the identification of hairs and  
3 fibers. The second one was on basic serology. And the  
4 third one was on biochemical methods of blood stain  
5 analysis.

6 Q How long was each of those courses?

7 A Each of those courses was two weeks, a concentrated  
8 two-week course; and each of the blood courses was  
9 accredited as a graduate course in the University of  
10 Virginia. The F.B.I. Academy being in Virginia.

11 Q Upon finishing college and graduate studies, where did  
12 you work?

13 A I worked for several industrial firms in laboratories as  
14 I stated earlier doing analysis of a wide variety of  
15 materials by instrumental methods.

16 Q When did you start to work for the Boston Police  
17 Department?

18 A In 1970.

19 Q What have your duties been as a criminalist in the  
20 Boston Police Department?

21 A My duties as a criminalist have been to, number one,  
22 go to crime scenes whenever requested, to examine those  
23 crime scenes and collect evidence. The evidence  
24 collected at these crimes scenes is taken back to the  
25 laboratory and analyzed. In addition, evidence brought

1 in from crime scenes which are investigated by police  
2 officers is also brought in and analyzed in the  
3 laboratory.

4 As a result of my findings in the laboratory,  
5 I write reports. Then I testify in court as to my  
6 findings.

7 Q Have you done work in the field of serology?

8 A Yes, I have.

9 Q Would you tell us what serology entails?

10 A Serology entails the analysis of body fluids. With  
11 respect to the work that we most commonly do, we work  
12 with blood and semen.

13 Q Tell us how many times you've been qualified to testify  
14 as an expert in serology in court?

15 A I've testified between 150 and 200 times, I would say  
16 roughly 75 to 100 times.

17 MR. CAMPO: Your Honor, at this time I would  
18 submit Mr. Bogdan as an expert in the field of serology  
19 and ask that he be recognized as such.

20 MR. GILDEN: No objection.

21 THE COURT: He may so testify.

22 Q Mr. Bogdan, were you involved in analysis of certain  
23 clothing and bedding material with regard to a rape that  
24 occurred at 1626 Commonwealth Avenue?

25 A Yes.

1 Q That was back in December of 1981, is that correct --  
2 strike that -- December of 1980?

3 A 1980, yes.

4 Q Would you tell us what items were turned over to you  
5 regarding that investigation?

6 A I received a number of items for examination. These  
7 consisted of a bed sheet, two pillow cases, an afghan,  
8 a couple of -- two pieces of gold cord, a leather belt.

9 Q Did you examine the items that you just indicated?

10 A Yes.

11 Q With regard to the two pieces of cord and the gold belt,  
12 did you find anything remarkable in those?

13 A No, I did not.

14 Q Were they examined chemically for prints?

15 A There was no way to -- there would be no -- you wouldn't  
16 be able to obtain prints from a surface like that cord  
17 had.

18 Q How about the belt?

19 A The belt was checked and no prints were detected.

20 Q With regard to the pillow cases, were those examined?

21 A Yes, they were.

22 Q Was anything remarkable found?

23 A There was nothing remarkable found on the pillow cases.

24 Q Did you examine the afghan?

25 A Yes, I did.

1 Q Anything remarkable about the afghan?

2 A No.

3 Q Did you examine the sheet that was turned in to you?

4 A Yes, I did.

5 Q Could you tell us what you observed on the sheet?

6 A On the sheet I observed a large, colorless stain near  
7 the center of the sheet.

8 Q Did you perform any tests on that sheet for the presence  
9 of semen -- strike that.

10 Did you perform a microscopic examination for  
11 the presence of sperm?

12 A Yes, I did.

13 Q What was the result of that examination?

14 A I did not detect any sperm cells.

15 Q Did you conduct an acid phosphatase for the presence  
16 of semen?

17 A I performed an acid phosphatase on it -- a test on that  
18 stain.

19 Q Could you tell us what acid phosphatase is?

20 A Acid phosphatase is an enzyme which is characteristically  
21 present in human semen.

22 Q Could you tell us what else it is present in?

23 A It can be -- it is also present in a number of other  
24 body fluids. For example, it's present in blood  
25 in lower concentrations. It's present in vaginal

1           secretions.

2       Q     Is it present in urine?

3       A     I believe that there could be low concentrations in  
4           urine.

5       Q     It's also present in perspiration, is that correct?

6       A     Yes, I believe so.

7       Q     Is an acid phosphatase test determinative of the  
8           presence of semen?

9       A     No.

10      Q     Is a microscopic examination for the presence of sperm  
11           determinative of the presence of semen?

12      A     Yes.

13      Q     Do you know of any other test which is conclusive for  
14           the presence of semen at this point, at this time?

15      A     At this time there is a test which is considered to be  
16           conclusive for the presence of semen.

17      Q     What do they call that?

18      A     That test is called a P-30 test.

19      Q     At the time of this incident was the Boston Police  
20           Department equipped to do that test?

21      A     No, we were not.

22      Q     Are you aware when the F.B.I. started using that test?

23      A     The F.B.I. started using that test, I believe, several  
24           months ago.

25      Q     At present are you equipped to do that test?

1 A Not at present.

2 Q Did you examine a maroon bathrobe?

3 A Yes, I did.

4 Q Did you conduct the same tests on the bathrobe?

5 A Yes, I did.

6 Q Did you find any sperm present microscopically on the  
7 bathrobe?

8 A No, I did not.

9 Q I show you Exhibit 18, which is the maroon robe, and  
10 Exhibit 19, which is an off-pink sheet, and ask you if  
11 you recognize those.

12 A Yes. These are the two items that we just discussed,  
13 the maroon robe and the sheet.

14 Q Those are the items you examined, correct?

15 A Yes.

16 Q Did you also examine hair samples?

17 A Yes, I did.

18 Q What type of hair samples did you examine, sir?

19 A These were hair samples that were present in rape kits  
20 that were submitted to the laboratory. Each of the rape  
21 kits contained samples of pubic hair of the person who  
22 had been examined and samples of pubic hair obtained by  
23 combing the pubic region.

24 The samples of known pubic hair were removed  
25 from the person to be used as standards for purposes of



1 comparison. These were removed by -- removed by  
2 plucking these hairs out, so we would know for sure that  
3 they were from that person.

4 Q Now, would it be fair to say that you had hair samples  
5 or pubic hair samples from Karen Kramke, Shannon Streeter  
6 and Valerie Hays?

7 A There were two rape kits here. One was --

8 Q I'm sorry, would it be -- strike that.

9 Would it be Karen Kramke and Shannon Streeter?

10 A That is correct.

11 Q Now, as a result of your examination of those pubic  
12 hairs did you find any hairs that were dissimilar to  
13 [REDACTED] or [REDACTED]?

14 A No, I did not.

15 Q You did not find any Negro pubic hairs, is that correct?

16 A No, I did not.

17 Q Did you perform any other tests on the sheet and the  
18 bathrobe?

19 A I did grouping tests on the stains which were tested.

20 Q When you say "grouping tests" would you explain to the  
21 jury what you mean by that?

22 A In most people, most persons are secreters. By that I  
23 mean that if a person is a secreteer, the blood group  
24 substances that are found in his blood are also found  
25 in his other body fluids, such as saliva, perspiration,

1 semen in the case of a male, vaginal secretions in the  
2 case of a female. So in the -- roughly 80 percent of  
3 the population which are secreters you will find these  
4 blood group substances in their other body fluids. It  
5 is possible to perform tests on samples of those body  
6 fluids to determine the person's blood type.

7 Q Now, with regard to the bathrobe and sheet, did you  
8 perform an absorption-inhibition test?

9 A Yes. That is the name of the test that is used to  
10 determine the blood group from the stain if the person  
11 from whom the stain came is a secreter. I did perform  
12 such tests.

13 Q As a result of your tests, would you tell us -- well,  
14 would you tell us the results of the tests?

15 A All right. In both cases, I determined that the stains  
16 originated from a person having Group O blood.

17 Q Did you examine the blood of [REDACTED]?

18 A Yes, I did.

19 Q Would you tell us what blood grouping [REDACTED]  
20 is?

21 A [REDACTED] had Group O blood.

22 Q Did you examine the blood of the defendant Rodriguez  
23 Charles?

24 A Yes, I did.

25 Q What was the result of that?

1 A I found that his blood was Group B.

2 Q Did you examine the blood of [REDACTED]?

3 A Yes.

4 Q Would you tell us what her blood grouping is?

5 A Her blood was Group O.

6 Cross-Examination by Mr. Gilden:

7 Q Mr. Bogdan, is it possible by the tests that you conduct --  
8 by the blood tests, to determine whether or not a person  
9 is or is not a secreter with the different blood types?

10 A Yes.

11 Q Do you know whether [REDACTED] was a Group O  
12 secreter or not?

13 A Yes, she was.

14 Q What about [REDACTED]?

15 A She was a Group O nonsecreter.

16 Q Mr. Bogdan, when you refer to semen is there a chemical  
17 difference between male seminal fluid and female  
18 vaginal secretion? In other words, can you determine  
19 by the tests that you conducted whether the stains or  
20 items that were tested by you were stained by male  
21 secretions or female secretions?

22 A Not by the tests I performed.

23 Q Are you aware of any tests that are available that could  
24 make that differentiation?

25 A Well, the test that I mentioned, the P-30 test is

1 considered to be specific for semen. So if that were  
2 present, it would be concluded that the stain was of  
3 seminal origin.

4 Q In other words, that P-30 test could determine whether or  
5 not the stain you found which your tests say is semen or  
6 seminal fluid comes from a male or a female?

7 A That would be --

8 MR. CAMPO: I'm going to object to the  
9 phrasing of that question. He did not testify that the  
10 stains were seminal stains, or to the contrary.

11 MR. GILDEN: I'm asking about the test.

12 THE COURT: Is your question related to a  
13 hypothetical examination and not this case?

14 MR. GILDEN: No, I'm asking if that test could  
15 determine whether a stain --

16 THE COURT: You're asking about the test?

17 MR. GILDEN: Yes, Your Honor.

18 THE COURT: But not anything performed in this  
19 case? You're talking about the P-30?

20 MR. GILDEN: Not yet; I may get to that.

21 THE COURT: Right. But are you talking to  
22 this extent about the P-30?

23 MR. CAMPO: Yes, Your Honor.

24 THE COURT: Okay.

25 A Well, the P-30, if present, would be specific for stating

1           that the stain contained material of seminal origin.

2       Q     From a male?

3       A     Yes. That would be from a male.

4       Q     Just for my own education, sir, when we talk -- when we  
5           talk about semen, we're talking about male ejaculate  
6           less any sperm, the fluid that they ejaculate -- that  
7           a male ejaculates during intercourse; would that be  
8           fair to say?

9       A     Well, yes. The way you're phrasing it, I would say yes.

10      Q     Well, how would you describe it more clearly?

11      A     Well, it may or may not contain sperm cells.

12      Q     Okay. But when we're talking about semen, we're  
13           talking about that fluid ejaculated by a male which  
14           may or may not --

15      A     The fluid portion of the male ejaculate, yes.

16      Q     All right. Just so we're talking about the same thing.

17                   It would be fair to say then, sir, that none  
18           of the stains that you found could have come from the  
19           defendant Rodriguez Charles, is that correct, based on  
20           your tests that you performed?

21      A     The tests that I performed showed the presence of  
22           acid phosphatase. That did not say, I believe I  
23           testified earlier, that it was semen conclusively or that  
24           it was not semen.

25      Q     None of the materials that you tested in any of the

1 tests that you performed came from a Type B secreter,  
2 did they?

3 A I did not detect any Type B blood substance in the  
4 stains I checked.

5 Q So that if any of the stuff -- the stains that you  
6 checked came from the defendant, they would show evidence  
7 of a Type B secreter, is that correct?

8 A They should show presence of the B blood group substance.

9 Q Now, did you make examination of any sort of the robe  
10 to determine whether or not there were any pubic hairs  
11 present in that robe?

12 A Examined the robe, and according to my note, hairs are  
13 not mentioned, so none were found.

14 Q Well, I ask you, sir, do you recall whether or not  
15 you specifically did the checking?

16 A Yes, I did.

17 Q Did you go to the crime scene?

18 A Yes.

19 Q Some of these items, did you take them into your own --  
20 your possession personally?

21 A The items that I mentioned earlier were brought to the  
22 laboratory by the police. I did not collect them at the  
23 scene at that time. The items that I collected at the  
24 scene consisted of the cardboard box which -- two boxes  
25 actually, which I took back to the laboratory to check

1 for the presence of fingerprints.

2 Q Do you work in the Fingerprint Division also?

3 A No. We do chemical tests for development of latent  
4 prints. If by those chemical tests we do bring out any  
5 prints, then we take them to the Identification Section  
6 for evaluation.

7 Q In other words, there are tests that can be performed  
8 even on cardboard that would -- that could bring out  
9 fingerprints?

10 A Yes.

11 Q Those boxes that you brought back -- strike that.

12 When you went to the apartment personally did  
13 you go alone or were you with someone else?

14 A I went with somebody else.

15 Q Was that one of the victims in this matter?

16 A I know I was there with Detective -- Officer Powers,  
17 William Powers, from the Identification Section. And my  
18 recollection is that [REDACTED] was there.

19 Q When [REDACTED] was there did she point out some items  
20 that might be of interest to you as a criminologist?

21 A I don't recollect.

22 Q Do you recall whether or not you went through the entire  
23 apartment?

24 A Yes, I did.

25 Q Did you examine the beds in the apartment?

1 A Yes.

2 Q Did you examine the beds for stains?

3 A My recollection is that I did examine the beds. I would  
4 have looked for stains at the time. The bedding that  
5 was brought to the laboratory was brought there before I  
6 went to the apartment.

7 Q So do I understand it, sir, that the bedding had  
8 already been removed by the time you arrived at the  
9 crime scene?

10 A Yes. Right.

11 Q Did you make -- I ask you again, do you recall whether  
12 you made any further examinations of the bedding or the  
13 beds themselves for stains of any sort?

14 A My recollection is that I did look at the beds when I  
15 was there.

16 Q Just a fast visual check?

17 A I looked -- yes.

18 Q Do you recall whether you found anything of interest to  
19 you?

20 A I have no note to the effect that anything was found, so  
21 my recollection -- so I would say that I did not see  
22 anything.

23 Q You don't have much recollection of the actual duties,  
24 is that correct -- I mean, what you did that day, other  
25 than what's in your notes?



1 A I can picture the apartment. I remember being there and  
2 looking at the beds. I can't remember specifically  
3 details further than that.

4 Q You were given some bedding to examine, is that correct?

5 A That's correct.

6 Q What types of bedding were received by you?

7 A The bedding consisted of a bed sheet, pillowcases. That  
8 was the actual -- and an afghan.

9 Q Did you make an examination of this bedding to determine  
10 whether or not any hair was found in this bedding?

11 A Yes.

12 Q Do you recall whether or not you found any hair in this  
13 bedding?

14 A No, I did not.

15 Q Is there a standard procedure in the Boston Police  
16 Department or was there at that time as to preservation  
17 of this type of evidence? In other words, is there some  
18 set procedure that officers are to follow when they're  
19 examining or gathering evidence at a crime scene such as  
20 this?

21 A You mean if a police officer goes to a scene and examines  
22 the scene and collects evidence?

23 Q Yes, particularly in a rape case of this nature.

24 A He will try to collect anything that he determines to be  
25 of evidential value, try to collect the evidence in such

1 a way that one bit of evidence is not contaminated by  
2 another. He would, for example, package things that  
3 were separated at the scene in separate packages; so  
4 that evidence of one type, whatever it might be couldn't  
5 be transferred from one item to another.

6 Q To the best of your knowledge was this procedure followed  
7 in this case?

8 A This procedure has been followed rather closely in  
9 recent years by the officers examining scenes. My  
10 recollection is that there was nothing incorrect in the  
11 handling of the evidence when it was brought to the  
12 laboratory.

13 Q So to the best of your recollection, this procedure was  
14 followed; that items taken together were segregated from  
15 each other so they wouldn't contaminate the other?

16 A Yes.

17 Q Were they delivered to you in a plastic bag of some  
18 sort?

19 A I cannot tell you whether they were in a plastic bag or  
20 a paper bag or a shopping bag; I don't remember.

21 Q But they're normally delivered in some kind of  
22 container?

23 A Yes.

24 Q Were they delivered in a different container than those  
25 shown you by the Assistant District Attorney?

1 A Yes. Those are the bags, plastic bags, in which we  
2 package our evidence for storage.

3 Q So the bags that were delivered to you would be  
4 different than what we see today?

5 A They might or they might not be. Sometimes we give  
6 police officers a number of plastic bags. When they  
7 have investigatory duties very often they like to have  
8 bags available. Otherwise, they have to find some  
9 suitable container.

10 Q So you try to provide your investigators with some tools  
11 to investigate a crime scene?

12 A Well, if they come up and ask, yes, we will.

13 Q Do you recall whether or not you would have examined  
14 the container that these materials came to you in?

15 A Yes, I would have.

16 Q To see if maybe there was some hair in there or something  
17 like that?

18 A Definitely.

19 Q So you would have made that type of examination?

20 A Yes.

21 Q You found none in any of the items that you -- that were  
22 presented to you, is that correct?

23 A That is correct.

24 Q Is there a difference between Negroid pubic hair and  
25 Caucasian pubic hair?

1 A Yes.

2 Q What's that difference?

3 A There's a difference between Negroid hair and  
4 Caucasian hair, and this difference extends to different  
5 types of body hair. The difference is basically in the  
6 appearance and color of the pigment, the presence in  
7 pigment, how it's located, the size of the particles,  
8 density and so forth.

9 Q Did you take a sample of the defendant's hair, or were  
10 you provided with a sample of the defendant's hair?

11 A I was provided with a sample of the defendant's -- no,  
12 no, I'm sorry. I was not.

13 Q You were not. But you were present when samples of his  
14 blood and saliva were given to a medical person, is that  
15 correct?

16 A Yes, I was.

17 Q And you took those samples into your custody and tested  
18 them, is that correct?

19 A That is correct.

20 Q Now, when you say there was nothing remarkable about an  
21 item what does that mean?

22 A I didn't detect anything that I considered to be of  
23 evidential value.

24 Q What types of things would you consider to be of  
25 evidential value?

1 A Fingerprints, hairs, stains, holes, tears, rips, things  
2 of that nature.

3 Q You say you received two rape kits?

4 A Yes.

5 Q I believe one was of [REDACTED] and one was of  
6 [REDACTED], is that correct?

7 A That's correct.

8 Q What is a rape kit?

9 A When a rape victim goes to the hospital they're usually  
10 examined in the emergency ward. At the present time  
11 they have special personnel for treating and examining  
12 these persons.

13 A rape kit is usually a prepared type of box  
14 containing certain envelopes and swabs and so forth,  
15 slides, for the purpose of collecting any type of  
16 evidence from the person that might be of use in  
17 evaluating the situation.

18 The particular rape kit, I believe, that we  
19 received was -- I think was called the Johnson Rape Kit.  
20 In this kit, which is a plastic box, there are envelopes  
21 for collecting known samples of the victim's pubic hair,  
22 for collecting combings of the victim's pubic region.  
23 The theory being that if there are any loose hairs  
24 included among the victim's in the victim's pubic region,  
25 that they might not be from the victim.

1 Swabs are taken of the vaginal area. If the  
2 circumstances dictate, swabs are taken, rectal swabs and  
3 oral swabs. Slides are made from those swabs. In  
4 other words, the material swabbed for the various body  
5 openings are smeared on slides and allowed to dry. The  
6 swabs themselves are also included in the kit.

7 So we have samples of hair, swabs, slides, and  
8 in some of the newer rape kits they also include things  
9 like fingernail -- envelopes for fingernail clippings or  
10 scrapings. They include tubes for samples of blood of  
11 the victim.

12 Some of the newer kits are getting even more  
13 extensive. I don't know what else; there may be other  
14 envelopes. There are extensive directions inside the  
15 kit.

16 The rape personnel in the hospital collects  
17 these various types of evidence as indicated, includes  
18 them in the kit. The police officer transmits that kit  
19 from the hospital to the laboratory.

20 Q After that material comes to you -- and I believe you  
21 said you used the Johnson Rape Kit -- you believe that  
22 the Johnson --

23 A I believe it was a Johnson Rape Kit, yes.

24 Q So at least you had combings from the pubic area of each  
25 of those two victims; you would have a known sample of

1 the pubic hair of each of those victims; you would have  
2 swabs probably from each of those victims; you might  
3 have a slide taken from that swab; is that correct?

4 A I might have; I might not. I mean, the procedure is not  
5 completely uniform. We're trying very hard. We consult  
6 with the various rape personnel and try to get them to  
7 include things in a way that is of value to us.

8 According to my notes here, these rape kits  
9 each contained samples of hair known and possibly  
10 strange, or hairs that might not belong to the victim.  
11 I don't have any note as to there being anything else.  
12 So it's possible they just included hairs in those kits.

13 Q So it's your testimony that both of those -- the rape  
14 kits on both of those young women contained no Negroid  
15 hairs?

16 A That is my testimony.

17 Q And your testimony is that no stains that you examined  
18 were from a Type B secreter?

19 A That is correct.

20 MR. GILDEN: I have no further questions

21 Redirect Examination by Mr. Campo:

22 Q Mr. Bogdan, with regard to the sheet, in your testing  
23 of the sheet blood grouping you found that the stains  
24 were deposited by a Group O secreter?

25 A That is correct.

1 Q And with regard to the bathrobe, you examined that and  
2 found that the stains on the bathrobe came from a  
3 Group O secreter?

4 A That is correct.

5 Q With regard to [REDACTED], would you tell us once  
6 again what [REDACTED] blood grouping is?

7 A She was a Group O secreter.

8 MR. CAMPO: Thank you. Nothing further.

9 MR. GILDEN: I have no further questions.

10 THE COURT: Thank you, sir.

11

12 JOHN COPE ABBOTT, Sworn

13 Direct Examination by Mr. Campo:

14 Q Would you please state your name?

15 A John Cope Abbott, A-b-b-o-t-t.

16 Q Mr. Abbott, would you tell us what your occupation is?

17 A I'm a forensic serologist with Serological Research  
18 Institute, East Coast Office, Burlington, Massachusetts.

19 Q Would you tell us what your educational background is  
20 with regard to qualifying you in the field of serology?

21 A I have a Bachelor of Arts degree in premedical and  
22 professional biology from Gordon College in Wenham,  
23 Massachusetts. I have a Master of Science degree in  
24 forensic chemistry from Northeastern University in  
25 Boston. I'm a registered medical technologist.



1 Q Would you tell us, sir, what your practical experience  
2 has been in the field?

3 A As a registered medical technologist and courses I took  
4 in that area, after my graduation from Gordon College,  
5 I was employed by Carnegie Institute in Boston, a school  
6 of medical technology, where I was senior lecturer in  
7 immunohematology and hematology, which is the  
8 identification of blood and blood diseases, the  
9 identification of blood groups, cross-matching of  
10 blood, identifying blood antibodies and antigens, the  
11 proteins in their cross-matching, purposes for medical  
12 transfusion.

13 A number of additional courses I taught there.  
14 At the same time, near the end of my tenure with  
15 Carnegie Institute, I got my degree through Northeastern  
16 University and subsequent to that was employed by the  
17 Michigan Department of Police as a forensic serologist  
18 at the Bridgeport Laboratory in Bridgeport, Michigan.

19 I spent two years there, from January 1978  
20 until November 1979, attached to the Microchemical  
21 Unit, specializing in forensic serology.

22 From November 1979 until December 1982 I was  
23 employed -- 1981 -- I was employed by the Commonwealth  
24 of Massachusetts Department of Public Safety at  
25 1010 Commonwealth Avenue, the chemical laboratory there

1 commonly referred to as State Police Chemical Lab. I  
2 was the forensic serologist for that department.

3 In January of 1982 I was employed by  
4 Serological Research Institute. I went to the home  
5 office in Emoryville, California; spent seven months  
6 there, and then returned to Massachusetts to open the  
7 East Coast Office in Burlington, where I am the  
8 forensic serologist and office manager.

9 Q Would you tell us if you have any professional  
10 affiliations or titles?

11 A Yes, I do, sir.

12 Q Would you tell us what those are, sir?

13 A I am a registered medical technologist with American  
14 Medical Technologists. I am the president of the  
15 Massachusetts State Society, American Medical  
16 Technologists. I am a commissioner with the Accrediting  
17 Bureau of Health Education Schools.

18 I am a member of the Northeastern Association  
19 of Forensic Scientists, the Midwestern Association of  
20 Forensic Scientists.

21 Q Would you tell us how many times you've been qualified  
22 to testify as an expert in serology in the courts of  
23 Massachusetts?

24 A In the Commonwealth of Massachusetts I have testified  
25 approximately 40 times.

1 Q How many times have you been qualified to testify in  
2 other states?

3 A In other states, approximately 30 to 40 times.

4 Q Would it be fair to say that you've testified for the  
5 prosecution and for the defense?

6 A Yes, sir.

7 MR. CAMPO: Your Honor, I would submit  
8 Mr. Abbott as an expert in the field of serology, and  
9 would again ask that he be recognized as such.

10 MR. GILDEN: No problem, Your Honor.

11 THE COURT: He may so testify.

12 Q Mr. Abbott, would you tell us exactly what the field of  
13 serology entails?

14 A Well, forensic serology in specific is that science  
15 dealing with blood and other body fluid analysis,  
16 paying particular attention to the identification of  
17 the item; what is the fluid; is it blood; is it semen;  
18 is it saliva; is it vaginal fluid; tears; nasal  
19 secretions; any type of body fluid. And could it be  
20 human or animal in origin. And if it is human, then  
21 from whom may that fluid have derived.

22 Q Mr. Abbott, were you asked to examine certain bedding  
23 and clothing regarding a rape that occurred at  
24 1626 Commonwealth Avenue?

25 A I'm not sure whether that was the address, but I was

1 asked to examine bedding and clothing, yes, sir.

2 Q I show you Exhibits 18 and 19 and ask you to look at  
3 those.

4 A Yes, sir.

5 Q Would you tell us if you've seen those two items before?

6 A Yes, I have, sir.

7 Q Where would that be?

8 A I saw them at my laboratory on January 12th, 1984.

9 Q Could you tell us for what purposes you were asked to  
10 examine those two items?

11 A I was asked to examine those items to determine whether  
12 there was any staining present and if that staining  
13 could be seminal fluid.

14 Q Now, did you in fact -- strike that.

15 Would you tell us what tests are conclusive  
16 for the presence of semen?

17 A There are only two tests considered conclusive for the  
18 presence of semen.

19 Q What is the most conclusive test?

20 A The most conclusive test for the presence of semen is  
21 the finding of spermatozoa, the male reproductive cells.  
22 Since women do not produce spermatozoa -- only men are  
23 capable of that -- the finding of spermatozoa is beyond  
24 question proof of the presence of semen.

25 Q Did you examine both the sheet and the bathrobe

1 microscopically for the presence of semen?

2 A Yes, I did, sir.

3 Q Would you tell us what the result of your examination  
4 was?

5 A I did not find spermatozoa present on any of the areas  
6 I examined.

7 Q What is the second test that is conclusive for the  
8 presence of semen?

9 A The second test that is considered conclusive for the  
10 presence of semen is a protein test known as P-30. It  
11 is a test of fairly recent development. It is a protein  
12 which is found only in human seminal fluid -- or in  
13 seminal fluid.

14 Q Did you conduct such a test on the bathrobe and the  
15 sheet?

16 A Yes, I did, sir.

17 Q Could you tell us the results of that test?

18 A I did not detect any protein P-30 in any of the areas  
19 I examined on those two items.

20 Q Now, as a result of your testing both items, based on  
21 your education and experience, can you give us an  
22 opinion as to whether or not the stains that appear on  
23 the bathrobe and on the sheet are semen?

24 A Yes, sir.

25 Q What is that opinion, sir?

1 A The stains on the bathrobe and the bed sheet are not  
2 seminal fluid or not consistent with seminal fluid.

3 MR. CAMPO: Thank you. Your witness.

4 Cross-Examination by Mr. Gilden:

5 Q Sir, the P-30 test, what is its degree of reliability?  
6 Has a percentage reliability been established for that  
7 test?

8 A I do not know whether a percentage has -- an exact  
9 figure of percentage has been applied. But using verbal  
10 predicates, a recent article published in January 1984  
11 from the Metropolitan Police Laboratory in London, which  
12 is commonly called Scotland Yard, has reviewed the P-30  
13 test and compared that with acid phosphotase techniques.  
14 One of their conclusions was that the P-30 technique is  
15 conclusive for the presence of semen as opposed to the --  
16 even the quantitative acid phosphotase test.

17 Q What is the quantitative acid phosphotase?

18 A There are two ways of doing acid phosphotase tests. One  
19 way is a qualitative, which means you simply look for a  
20 color. You apply chemicals to a stained area or extract  
21 a stain and apply chemicals. If a purple color develops,  
22 it means acid phosphotase is present. It gives you  
23 very little, if any, idea of quantity; just that there  
24 is acid phosphotase present.

25 The quantitative technique is to extract the

1 stain and actually attempt to determine how much  
2 acid phosphatase is present; not only is it present, but  
3 how much. The quantitative test has been until recently  
4 considered a reasonable technique for the identification  
5 or indication of semen, but still not conclusive.

6 Q Now, when you received the items from the -- I assume  
7 from the District Attorney's Office, or whoever you  
8 received those items from -- did you receive any other  
9 items for comparison purposes?

10 A I do not recall receiving any other items, sir.

11 Q Did you receive any other information for purposes of  
12 comparison?

13 A I believe I received some information concerning prior  
14 testing that may have been done on those items.

15 Q Did you -- can you determine from the tests that you are  
16 capable of doing whether or not a particular person was  
17 the secreter of the stains that you find on a piece of  
18 cloth?

19 A The particular tests which I did, you cannot make such a  
20 determination.

21 Q You were not asked to make that determination, is that  
22 correct?

23 A No, I was not, sir.

24 Q So all you were asked to do is find out whether or not  
25 in your professional opinion based on the tests that

1           you're capable of performing, semen was present on the  
2           items that you received?

3       A     That is correct, sir.

4       Q     And you found none?

5       A     I found no semen present, sir.

6                       MR. GILDEN:   Okay.   Thank you very much.

7                       Redirect Examination by Mr. Campo:

8       Q     Just one other question with regard to acid phosphatase,  
9           Mr. Abbott, would you tell us what other body fluids  
10          acid phosphatase is found in?

11      A     The predominant other body fluid is vaginal fluid.

12                      MR. CAMPO:   I have nothing further.   Thank you.

13                      THE COURT:   Thank you.

14                      THE WITNESS:  Am I excused, Your Honor?

15                      THE COURT:   Yes, you are.

16                      (Bench conference:)

17                      MR. CAMPO:   I am about to conclude the  
18          Government's case.  There are several points that  
19          Mr. Gilden and I have agreed to by way of stipulation.  
20          If Your Honor would consider taking the morning recess  
21          now, we can work out any final details.  Then we can  
22          submit that, and I will rest.

23                      MR. GILDEN:  That's fine.  I'm taken a little  
24          bit by surprise.  I may have some problems, because I  
25          expected not to start any testimony until tomorrow