## State of Texas v. Ronald Gene Taylor

April 28, 1995

Testimony of Maurita Carrejo Serologist with Houston Police Department

1 (At this time the witness 2 is excused from the 3 courtroom.) 4 5 6 MAURITA CARREJO 7 was called as a witness by the State and, having been duly sworn, testified as follows: 8 9 10 DIRECT EXAMINATION BY MS. VELASQUEZ: 11 12 Ma'am, would you state your name for the record? 13 14 Α Maurita Carrejo. 15 How are you employed? Q 16 By the Houston Police Department. Α What do you do for them? 17 Q 18 Α I work in the Crime Laboratory in the 19 serology section. 2.0 Q What do you? 21 We analyze evidence from criminal cases to look for blood and other bodily 22 23 fluids, and then we test them to determine whose bodily fluids it may or 24

may not come from.

7 Are you an officer, or what is your 0 2 title? My title is a Criminalist. 3 Α 0 Would you give us your educational 5 background, please? 6 Α Yes, I will. I have a Bachelor's in 7 chemistry and a Master's Degree. 8 Q Have you had any specialized training in 9 serology? 10 Well, I've been working in the field for A 11 almost nine years. During that time I 12 have had in-house training with the 13 Texas Department of Public Safety where I used to work and then with the Houston 14 15 Police Department. I've attended 16 numerous schools put on by the Federal 17 Bureau of Investigation as well as the manufacturer's of instruments and 18 19 products that we use. 2.0 MR. SPARKS: We would 21 stipulate that she's an expert 22 witness. 23 MS. VELASQUEZ: I'd object

know her.

to that since the jury doesn't

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1		THE COURT: Sustained.
2		I'll let her answer.
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4	ВУ М	IS. VELASQUEZ:
5	Q	Please continue where you left off.
6	Α	After I completed my Master's Degree I
7		worked in the field for awhile. I was
8		geared towards the field of forensics.
9	Q	You indicated that you analyze various
10		types of evidence at the lab, correct?
11	A	Yes.
12	Q	Including bodily fluids?
13	Α	Yes.
14	Q	What does serology mean?
15	A	It means analyzing blood and other
16		bodily fluids.
17	Q	Have you had occasion to examine sexual
18		assault kits?
19	A	Yes.
20	Q	Do you actually take the sexual assault
21		kits yourself?
22	Α	I do not.
2 3	Q	Where is that done?
24	А	It's done in hospitals by medical staff,
25		nurses or doctors in a hospital.

- Q First of all, what is a sexual assault kit?
  - A It's a package that can be used to collect evidence in a sexual assault case. It's got all the components in there from the exam to be analyzed by the laboratory.
  - Q Does it contain such things as seminal swabs?
- 10 A Yes.

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- 11 Q Vaginal and anal swabs?
- 12 A Yes.
- Q Does it contain hair?
- 14 A Yes.
- 15 Q What about fingernail scrapings?
- 16 A Yes.
- 17 | Q Nails?
- 18 A Yes.
- Q When you get things of that nature, do
  you have to do something to be able to
  compare them?
  - A The first thing you do is determine whether or not there is evidence of semen or blood stains or whatever it is that we refer to as trace evidence.

1 Trace evidence can be anything from hair 2 to dirt to fibers to pieces of plastic, 3 for example. Once we determine what it 4 is, then you determine whether or not it 5 can be compared to something. б Q Do you recall having received a sexual 7 assault kit in the Houston Police 8 Department in Case No. 55114693? 9 Α Yes. 10 When you receive a sexual assault kit, 0 11 do you give it a particular offense 12 report number? 13 Α Yes. 14 0 Does it also have the complainant's 15 name? 16 Α It does. 17 Q The complainant is the person who the swabs and the hair and blood were taken 18 19 from? 20 Α Yes. 21 Q Is that a known sample? 22 Α Yes. In a sexual assault kit, basically what 23 0 24 do you receive?

We typically do receive a known blood

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vaginal swabs, vaginal smears, anal swabs, anal smears, oral swabs and smears, fingernail scrapings, pubic hair combings, pulled pubic hair, pulled head hair, and then depending upon which kit this particular hospital is using, it may or may not contain some other components to it.

- When you get those kits, do you put your lab number or some identifying mark on them so you're always able to trace the case number to the complainant?
- A Right.
- Q Sometimes do you receive other evidence by clothing?
- 17 A Yes.

- Q In this particular case where the complainant was can you tel us what you received?
- A I received a sexual assault kit. I also received a cardboard box that contained a gown, a bra, a fitted bedsheet and --
- Q On that fitted bedsheet, do you know if

,					
1		that's where the alleged offense took			
2		place?			
3	A	Yes.			
4	Q	Did that fitted bedsheet have an offense			
5		report number on it or on the plastic			
6		bag?			
7	Α	I don't recall.			
8	Q	How do you know the bedsheet corresponds			
9		to this case number and this			
10		complainant?			
11	А	It was in the property.			
12	Q	So the numbers would have corresponded?			
13	A	I got it from the property room. It had			
14		the correct incident number on it.			
15	Q	When you got the sheet, did you know why			
16	- County-services (September 1978)	it was submitted to you?			
17	A	I make assumptions.			
18	Q	So you get the bedsheet, for instance,			
19	r	and you've already got the sexual			
20		assault kit, correct?			
21	A	Yes.			
22	Q	Did you perform any tests on that sheet?			
23	A	Yes.			
24	Q	Did you perform any tests on the			
25		garments of clothing?			

A Yes.

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- Q Do you do that right away or wait until it's requested?
  - A We wait until it's requested.
  - Q Did you ever have occasion to -- Strike
    that. The bedsheet -- I'm sorry.
    Strike that.

Were you ever requested to test the clothing, specifically the panties and bra or the bedsheet?

- A I was requested to perform an analysis in this case. Once we get a request for a specific incident number, we request all of the evidence in that incident number from the property room.
- Q You cannot make a comparison -- strike
  that -- I guess what I'm asking you is
  do you have to analyze the bedsheet and
  the articles of clothing and get your
  results before you would be able to
  compare that or those samples submitted
  to you from the suspect?
- A Well, I had to have something to compare it to, yes.
- Q Do you recall analyzing the bedsheet and

- bra and underwear for semen?
- 2 A Yes, I do.

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- Q Did you find any semen?
- A I did not.
  - Now, is semen the equivalent -- strike that. Does semen come out of a man when he ejaculates?
- A Yes.
  - Q In seminal fluid, is there going to be semen in it?
  - A There is something called pre-ejaculate which is sometimes referred to as semen but it is not accurate. Semen is the large volume of ejaculate which comes from certain parts of the reproductive track. Pre-ejaculate is made further along the reproductive track and is ejaculated earlier than the actual ejaculate of semen.
  - Q So if a male was to have that pre-ejaculate stuff come out, is that necessarily going to test for semen?
  - A No.
  - Q What is in semen? Does it have some kind of property that, you know, is like

an identifier?

A Yes, there are several different ways to go about identifying semen. One is to identify sperm cells. Semen is the liquid. Most men's liquid ejaculate contains sperm cells. We test the semen to look for sperm cells. If they are absent, it's either because there are none or because they're from a male who does not have sperm cells.

Let me go back. We look for sperm cells under the microscope. We use a microscopic slide. We use a procedure that helps us see the structures of the cells better. We look at it under a microscope at four hundred power magnification.

Another thing we do is when we have a vaginal swab or a stain from a pair of panties or a bedsheet is to test for a protein called P-30. That protein is found in semen. There is a test that can be done on stains such as swabs and clothing.

Q But if a man does not ejaculate, there's

not going to be any semen?

A Right.

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- Q I believe you said that an ejaculate -strike that. Is there ever an exception
  where there would be no sperm cells in
  the ejaculate?
- Α Yes, there are a number of ways that a male would not have sperm cells in the ejaculate. One would be if they had had a vasectomy and it had worked right. Another would be if they had taken certain drugs which have a tendency to either decrease the sperm count or completely eliminate sperm cells. Another exception would be if he had ejaculated many times over a short period of time, say during one day. sperm count could be depleted almost to nothing. Also, there are medical conditions which would cause the sperm count to be greatly lowered.
- Q Let me give you a hypothetical. Let's say a man had ejaculated several times during the course of one day. Then they committed a sexual assault and

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1 ejaculated. Do you feel that you would 2 find some kind of evidence of 3 ejaculation? Α If they ejaculated, there should still 5 be some evidence of the protein which is 6 independent of sperm cells. Q So what you're looking for is protein? Я Α Right. 9 Q Let me ask you this. If a man is 10 impotent or let's say he's hard, soft, 11 hard, soft, erect, not erect, could that 12 perhaps be a reason why there is no 13 ejaculation and the reason you wouldn't find evidence of ejaculate in some of 14 15 the items you analyzed? 16 Α Yes. 17 0 About how many sexual assault kits in 18 cases where the allegations are sexual 19 assault do you actually find semen? 20 Would it be a hundred percent? Eighty 21 percent? Forty percent? 22 MR. SPARKS: I'd object to 23 the compound nature of the 24 question, Judge.

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THE COURT: Overruled.

1		You can answer.
2	A	I would say overall probably somewhat
3		less than fifty percent or somewhere
4		around fifty percent. Oftentimes in
5		juvenile cases there's allegations of
6		sexual assault but the sexual assault
7		was not vaginal penetration. It could
8		be that a finger was used or whatever.
9		That would make a difference.
10	Q	So is it surprising to you, your
11		findings in this case?
12	A	No.
13	Q	Why not?
14	A	Because as I sort of alluded to a minute
15		ago, it could be that there was no
16		vaginal penetration. Something else may
17		have been used. I still might get a
18		sexual assault kit but maybe there was
19		no ejaculation and we don't find semen.
2 0	Q	So it's not unusual in a sexual assault
21	Personnella de la companya de la comp	case for there to be no semen?

witness.

A Right.

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MS. VELASQUEZ: Pass the

## CROSS-EXAMINATION

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2	I BY	MR.	SPAI	RKS:

- Q So semen is not the same as the protein?
- 4 A The protein is a component of the semen.
  - Q Is it present more often than semen?
- 6 A No.

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- 7 Q Less often?
  - A They are linked. Semen also contains
    P-30 protein. It's one component of the
    ejaculate.
    - Q Is there a percentage of that which is ejaculated prior to there being orgasm and ejaculation?
    - A I don't know what the percentage is.
    - Q But usually there is pre-ejaculate to assist in penetration of the female sex organ; is that correct?
    - A That's right.
  - Q And more ejaculate comes out during the orgasm which centains semen; is that correct?
- 22 A Yes.
- Q In your professional opinion, if you
  were to hear that an individual had
  semen or a liquid substance running down

her leg from a sexual encounter, would that cause you to think that it was more than just pre-ejaculate that had been ejaculated?

MS. VELASQUEZ: Counsel is violating the Rule, Your Honor.

THE COURT: Overruled.

A Yes.

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- Q If you were informed that a bedsheet had a wet spot on it, would that cause you to think that the wet spot was more than just pre-ejaculate?
- A I don't have enough facts to state an opinion about that.
- Q Well, let me ask you this. Do you have enough facts per the evidence that you conducted your investigation on to say whether or not there is anything to link Ronald Gene Taylor with this evidence?
- A I didn't have anything to link Ronald Taylor or anyone else.
- Q In your professional opinion, did you have anything pertaining to Ronald Taylor's genetic makeup to link it to the vaginal swabs that were done from

1	7			body?
2	A	That's	correct	
3	Agent and a second a second and			MR. SPARKS: No further
4			quest	ions of this witness.
5				MS. VELASQUEZ: No further
6			guest	ions.
7				The State rests.
8	This common way below to			
9				(At this time the witness
10				is excused from the
11				courtroom.)
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13				THE COURT: Ladies and
14			gentle	emen, please step back to
15			the ju	ary room for just a moment.
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17				(The following proceedings
18				are held outside the
19				presence of the jury.)
20				
21				MR. SPARKS: I would make
22	·		a Moti	ion for an Instructed
23			Verdic	ct of acquittal for Mr.
24			Ronald	Gono Taulor in the matter

in which the State has charged