

1 THE COURT: Call your next witness, please.

2 MR. OTTO: State calls Amy Castillo.

3 A JUROR: She left her original notes.

4 A JUROR: Her original report is up there.

5 THE COURT: Is that what's in evidence?

6 THE JURORS: That's her copy.

7 MR. OTTO: No, we have it. Would you like for
8 me to take it to her, Your Honor?

9 THE COURT: Yes, please do. I can't see over
10 the wall there.

11 Right up here, please, ma'am. Come right
12 around up here. Before you have your seat, if you would
13 raise your right hand to take the oath.

14 (Witness sworn.)

15 THE COURT: If you would, have your seat,
16 please. Would you please state and spell your name for my
17 court reporter.

18 THE WITNESS: Amy Castillo, C-A-S-T-I-L-L-O.

19 THE COURT: And you may proceed.

20 MR. OTTO: Thank you, Your Honor.

21 **AMY CASTILLO,**

22 having been first duly sworn, testified as follows:

23 **DIRECT EXAMINATION**

24 Q. (BY MR. OTTO) Good morning -- excuse me. Good
25 afternoon, Ms. Castillo. How are you?

1 A. Good morning -- or good afternoon.

2 Q. How are you doing today?

3 A. Good. How are you?

4 Q. I'm doing well. So, can you tell us what do you do
5 for a living?

6 A. I'm a criminalist at the Houston Police Department
7 crime laboratory.

8 Q. Okay. What does a criminalist do?

9 A. A criminalist -- actually a criminalist specialist.
10 I apologize. We receive evidence into the lab and analyze
11 it and report the results.

12 Q. And when you say, "We receive evidence and analyze
13 it," do you have a particular type of evidence that you
14 analyze?

15 A. We analyze a lot of sexual assault kits but we also
16 analyze evidence from homicides, burglaries, any crime where
17 it's requested for us to analyze evidence.

18 Q. And what do you mean by "analyze"?

19 A. In our section specifically, and I should have been
20 more specific, I'm in the biology section and so the first
21 step that we analyze is generally body fluids on evidence
22 and if body fluids are found, then we do DNA analysis on the
23 body fluids.

24 Q. And let's talk a little bit about your history and
25 analysis. Did you go to school for this?

1 A. I didn't go to school specifically for this;
2 however, I have a bachelor's degree in biochemistry. I also
3 have a doctorate degree in biochemistry, both from the
4 University of Houston.

5 Q. When did you graduate with your doctorate from the
6 University of Houston?

7 A. In 2007.

8 Q. And whenever you graduated from UH, where did you
9 go from there?

10 A. I went to a company called VisiGen Biotechnologies,
11 which was a company working on research and development of
12 realtime DNA sequencing, which is basically DNA sequencing
13 and you watch it as it's happening. I worked there until I
14 came to the Houston Police Department.

15 Q. And what did you do there?

16 A. I was in research and development. I specifically
17 worked on developing proteins to use in the realtime DNA
18 sequencing.

19 Q. And have you worked with DNA since 2007?

20 A. Actually all through graduate school, we worked
21 with DNA.

22 Q. Did you do a thesis as part of your doctorate?

23 A. Yes, I did.

24 Q. Was that on DNA as well?

25 A. It wasn't on DNA; however, the tools used to do my

1 research are very similar to the tools we use to do DNA
2 analysis. PCR, for example, which is when we make a lot of
3 copies of DNA, that was a huge part of what I used in my
4 research.

5 Q. And whenever you went to work for the Houston
6 Police Department crime lab, what year was that?

7 A. 2010.

8 Q. So, you've been there for a little over three years
9 or about three years?

10 A. Yes, sir, about three years.

11 Q. And have you always been a criminal specialist -- a
12 criminalist specialist at HPD crime lab?

13 A. No, sir. I was hired as a criminalist and then in
14 June of 2013, I was promoted to criminalist specialist.

15 Q. What's the difference between those two things?

16 A. As a criminalist specialist, first you do have to
17 have a minimum of three years in forensics, which I had
18 gained before the promotion, and also I now supervise people
19 underneath me, other criminalists.

20 Q. So that was a promotion?

21 A. Yes, sir.

22 Q. And as part of your job analyzing these samples, I
23 know you can't give me an exact number but how many of these
24 types of samples of DNA have you analyzed at the HPD crime
25 lab?

1 A. Quite a few and I have to -- the last year I've
2 actually been on -- I'm a project leader for an outsourcing
3 project, so I haven't been writing a lot of cases in the
4 last year but prior to that, a lot of cases and it's hard to
5 say an exact number but that's what I was doing on a daily
6 basis.

7 Q. Were you asked to examine any evidence in the
8 Incident No. 134594511?

9 A. Yes, sir. May I refer to my report?

10 Q. Yeah, absolutely.

11 A. Yes.

12 Q. When were you asked to do that?

13 A. Well, the report is dated June 15th, so
14 approximately around that date.

15 Q. June 15th of what year?

16 A. Of 2012. I apologize.

17 Q. Now, can you explain to us how a piece of evidence
18 gets to your lab?

19 A. Well, the way that our lab gets evidence is
20 actually from the Houston Police Department property room.
21 Once a request is made, we have an evidence technician who
22 goes and picks up the evidence and brings it to the
23 laboratory. And that's how we are -- we obtain the
24 evidence.

25 Q. Now, do you test every piece of evidence that's

1 tagged into HPD property?

2 A. It depends. It would be requested, first of all,
3 and then it depends -- case to case, it depends on what the
4 investigator or -- really anybody involved in the case is
5 requesting to be tested. If there's a lot of evidence, we
6 may not test every piece but we will test every piece
7 requested.

8 Q. Okay. In this case, were you asked to test
9 specific pieces of evidence?

10 A. It looks like, as far as -- from the initial
11 process, we were asked to test the sexual assault kit.
12 There's also a box containing evidence that the screener
13 doesn't look like she opened it so we didn't test that.

14 Q. Okay.

15 MR. OTTO: Your Honor, may I approach?

16 THE COURT: You may.

17 MR. OTTO: And if I can -- there's a copy of
18 this that's with the business records affidavit in the
19 court's file.

20 THE COURT: Okay. The clerks should have
21 that.

22 MR. OTTO: Okay. Excellent. Should be on
23 1390391. So much stuff.

24 (Clerk and Mr. Otto whispering.)

25 Q. (BY MR. OTTO) Now, Ms. Castillo, sorry about that.

1 A. It's okay.

2 Q. Whenever you were asked to analyze those pieces of
3 evidence, what you called the -- what did you call it? I'm
4 sorry.

5 A. The sexual assault kit.

6 Q. Sexual assault kit. What pieces of that kit were
7 you given?

8 A. Are you referring to what the screener tested or
9 what I did the DNA analysis on?

10 Q. Specifically what you were testing.

11 A. Okay. I did DNA analysis on the vaginal swab, a
12 portion of the vaginal swabs, a portion of the anal swabs,
13 we had a reference sample from Alexzandria Jackson, portion
14 of a stain from panties, portion of right side of neck swabs
15 and also a reference sample from Kojuan Miles.

16 Q. Okay. So I'd like to talk to you a little bit
17 about first how you got those things and then what you did
18 with them. So you said there were specific things that went
19 through what you called a screener?

20 A. Uh-huh.

21 Q. Okay. What is that?

22 A. Basically what the screener does is they're the
23 ones who initially open the kit and screen it for body
24 fluid; specifically, semen or spermatozoa in the sexual
25 assault kit. Once they get through that process and

1 determine that there is a potential body fluid there or
2 potential DNA, they then portion those samples and we retain
3 those portions in the laboratory until DNA analysis is going
4 to be done and the rest of the kit would go back to the
5 property room at that point.

6 Once it's put -- the portions are retained in
7 the lab, a DNA request is made within our lab for that DNA
8 analysis to be done and those portions are stored. In this
9 specific case, I never handled the actual evidence. I
10 wrote -- I did the DNA analysis, so other people actually
11 went and got those portions and began the DNA analysis
12 process.

13 Q. And so basically there's a step that happened
14 before the actual analysis that says, hey, is there sperm
15 here, is there semen here, that we're even going to be able
16 to test; is that right?

17 A. Correct. There's a step where we determine -- you
18 know, if there's body fluid, if that was requested, but also
19 if there's potential for any other kind of DNA, that's all
20 done at that step and it's decided what will be retained in
21 the lab for potential DNA.

22 Q. So if something is tested and there's no -- there's
23 nothing on it or body fluids that would indicate the
24 presence of DNA, you don't go ahead and test those for DNA?

25 A. Not at this time. We weren't doing that unless

1 there was the potential for contact, depending on what the
2 medical report would have said.

3 Q. And so, you basically retained those pieces that
4 kind of passed the initial screening?

5 A. Exactly.

6 Q. And that's for efficiency purposes?

7 A. Yes.

8 Q. Now, the things that you read to us, the samples
9 that were given for analysis, did those initially test
10 positive for bodily fluids that could be tested?

11 A. I'm going to double-check both reports just to make
12 sure.

13 Q. Absolutely.

14 A. Of course the reference swabs, no, we retain those
15 for the comparison's sake. The vaginal swabs, the anal
16 swabs and the stain from panties, spermatozoa were detected
17 on those items. The portion of right side of neck swabs,
18 the screener -- screening result was semen was indicated on
19 the items but no spermatozoa were detected.

20 Q. You used a lot of terms there and I'd kind of like
21 to parse those out a little bit. When you say "spermatozoa"
22 or "sperm," how is that different than semen?

23 A. Well, semen is the fluid that the sperm travels in.
24 The sperm is the actual sperm cell, which we can visually
25 see, where semen's just the liquid; and you can't have semen

1 without sperm, so we do indicate specifically that that was
2 a possibility but we did not -- we're not able to confirm it
3 by seeing sperm.

4 Q. And if you have the presence of sperm or semen, are
5 you then able to further test that for DNA profiles?

6 A. The potential is there.

7 Q. Okay. Explain to us what that testing is, what
8 that second process is.

9 A. For the --

10 Q. As sort of layman's as I am.

11 A. Okay. Sounds good. So basically, as I said, once
12 we start the -- the extractors are actually the first
13 persons to handle the portions of DNA evidence and what they
14 do is extract the DNA. What this process is is they take
15 the piece of evidence, they soak it in some chemicals that
16 they use which helps remove the DNA from the substrate or
17 the piece of evidence but it also breaks the cells open that
18 the DNA is in.

19 In this case we actually did something called
20 a differential extraction which allows us to use two
21 different extraction methods. One of the extraction methods
22 is for nonsperm cells, so it's a little less harsh. We do
23 that first and then we can actually separate the sperm cells
24 out and wash them and then we extract and open up those
25 sperm cells. Once it's extracted, then we go through a

1 clean-up process so that the DNA can be cleaned from all of
2 the cellular debris and anything that was with the evidence
3 that the DNA was on. At that point we then will determine
4 how much DNA was recovered so that we can do the next step
5 efficiently.

6 The next step is amplification or PCR, as I
7 mentioned at the very beginning. What that step is is
8 basically we're making a ton of copies of very specific
9 regions of the DNA that we call the profile. And because
10 there's a ton of copies made, then we can actually visualize
11 by separation what the -- what those locations were and
12 designate them -- what we call alleles or numbers and so you
13 can have -- then you'll get a compilation of a whole profile
14 of what we amplified and that will tell you what the profile
15 was on the evidence.

16 Q. So once you've done all that and you have a
17 specific profile, are you then able to compare that to other
18 profiles that you might determine?

19 A. Yes, and that's the role that I played in this
20 was --

21 Q. You also mentioned earlier the term "reference
22 sample." What do you mean by that?

23 A. A reference sample is when they collect a sample
24 from somebody, we know who that sample is collected from.
25 It's normally a buccal swab and they tag it in the property

1 room as known buccal swabs from that person.

2 Q. So, with this specific case, were you able to get
3 DNA profiles off of the pieces of evidence that were tested?

4 A. All except one. The portion of the right side of
5 neck swabs we did not get any DNA profile but we did get
6 profiles off the rest of them.

7 Q. Were you also provided reference samples with
8 regards to this incident?

9 A. Yes, for Alexzandria Jackson and Kojuan Miles.

10 Q. Okay. Did you compare the profiles that you got
11 off of the evidence to the profiles of both Ms. Jackson and
12 Mr. Miles?

13 A. Yes.

14 Q. Okay. Now, I'd like to talk to you a little bit
15 about those comparisons. Did you find any matches to
16 Alexzandria Jackson in these profiles?

17 A. I'm going to go through the conclusions. The
18 epithelial fraction, which, as I was explaining before, of
19 the vaginal swabs, we were able to include Alexzandria
20 Jackson as being consistent with that profile.

21 Also the epithelial fraction of the anal
22 swabs, she could not be excluded as the contributor to the
23 minor component of that DNA mixture. When I say that,
24 basically the profile that we had indicated there was more
25 than one person in that profile but there was one person who

1 donated a lot more DNA than the other person, and in this
2 case Alexzandria Jackson was included; however, she was in
3 the smaller portion of that profile.

4 Q. Did you, in running a reference of Kojuan Miles to
5 these DNA samples -- let me ask this first: Did you find --
6 are you able to determine if samples have male DNA as
7 opposed to female DNA?

8 A. Yes, we are. We have a location called the
9 amelogenin that we -- it's designated as only an X if it's
10 female and you have an XY if it's a male.

11 Q. Did you find any male spermazoa, sperm, semen, any
12 of those things in the -- spermatozoa, excuse me -- sperm or
13 semen in any of these samples?

14 A. Well, I want to clarify. We did get male DNA
15 profiles. That doesn't indicate necessarily a hundred
16 percent that it came from sperm or semen but we did on these
17 items find a male profile.

18 Q. Okay. Did that male profile match Kojuan Miles?

19 A. No, he was excluded from all of these items.

20 Q. Okay. Now, I want to -- whenever -- if you're able
21 to talk about this in your experience; if not, let me know.
22 If you're testing DNA and there is no sperm, no bodily
23 fluids, no semen that's present, provided there's no other
24 contact DNA, are you able to get a profile, a DNA profile?

25 A. If there's no contact and no semen, no body fluid,

1 you wouldn't expect to see a profile -- foreign profile.

2 Again, contact is very difficult because you don't -- we

3 have no test to let you know if there was contact or not, so

4 it's hard to say for sure what you're asking, that

5 specifically you wouldn't get anything. But, you know, if

6 you do see sperm or semen and we can test for that, it's

7 more likely that you're going to find a DNA profile.

8 Q. In an instance where two people had had sex, we

9 know that -- let's assume for a moment we know that they had

10 sex and the male, and if I can use a slang term, pulls out,

11 would you believe that the presence of DNA is just as likely

12 or less likely than if the male had ejaculated inside of the

13 female?

14 MR. JOHNSON: Objection, Your Honor,

15 relevance.

16 THE COURT: Overruled.

17 A. Okay. So, I think there's a lot of factors

18 involved in there. However, when we are testing for body

19 fluids, if the chance is that the body fluids are less

20 likely to be there, you would less likely to get a profile

21 but there's a lot of factors involved in when he pulled out

22 and when -- so it's not a hundred percent answer but when

23 you do leave the body fluid behind, you're leaving more DNA

24 behind.

25 Q. So if someone doesn't ejaculate inside, if the male

1 doesn't ejaculate inside of the female, is it less likely
2 they will leave behind a DNA trace?

3 A. It's less likely you would find a foreign DNA
4 profile, especially on vaginal swabs, given the amount of
5 DNA that the female contributes.

6 Q. What do you mean by that, "especially on vaginal
7 swabs"?

8 A. Well, in vaginal swabs, the female just
9 contributes, in our profiles, a lot of DNA, so even
10 sometimes if you have a little -- just, like, five sperm is
11 what we find in the screening, sometimes the amount of
12 female DNA can overwhelm in our amplification process the
13 male DNA and so it's hard to see that foreign DNA profile.

14 MR. OTTO: Pass the witness, Your Honor.

15 THE COURT: Mr. Johnson?

16 MR. JOHNSON: Nothing, Judge.

17 THE COURT: May this witness be excused?

18 MR. OTTO: Yes, Judge.

19 MR. JOHNSON: Court's pleasure.

20 THE COURT: Thank you, ma'am. You're free to
21 go. Please do not discuss your testimony with any of the
22 other witnesses.

23 THE WITNESS: Okay. Thank you.

24 THE COURT: Ladies and gentlemen, we're going
25 to recess for the day. We're going to start in the morning,

1 just like we did today, at 9:30. So if y'all can be in the
2 jury room ready to go at 9:30. Please remember all the
3 Court's admonishments and I'll see y'all in the morning.
4 Have a good evening.

5 (Jury not present.)

6 **PROFFER OF TESTIMONY**

7 *THE COURT:* Ms. Jackson, come up here real
8 quick. We're almost done.

9 Go ahead, Mr. Hochglaube.

10 *MR. HOCHGLAUBE:* May I proceed?

11 *THE COURT:* Uh-huh.

12 *MR. HOCHGLAUBE:* May I approach the witness?

13 *THE COURT:* Uh-huh.

14 **ALEXZANDRIA JACKSON,**

15 having been first duly sworn, testified as follows:

16 **DIRECT EXAMINATION**

17 **OUT OF JURY'S PRESENCE**

18 *Q. (BY MR. HOCHGLAUBE)* Ms. Jackson, I want to show
19 you what we've marked as Defendant's Exhibit No. 1. It's a
20 number of papers. Would you just take a moment to look
21 through those?

22 *A. (Complies.)*

23 *Q.* Thank you. Have you had a chance to look through
24 all of the pages in Defendant's Exhibit 1?

25 *A. Yes.*