

1 THE WITNESS: I do.

2 THE COURT: All right. Feel free to
3 adjust the chair and the microphone. It bends, so
4 you can bend it right in front of your face area and
5 just talk normally. And if we can't hear you we'll
6 turn it up. And I'm going to ask you to just answer
7 as directly as you can.

8 All right. You may proceed.

9 MICHAEL PIERCE,
10 having been first duly sworn, testified as follows:

11 DIRECT EXAMINATION

12 BY MS. DAVIDSON:

13 Q Can you introduce yourself to the ladies and
14 gentlemen of the jury?

15 A Yes, my name is Michael pierce. I'm a DNA
16 analyst.

17 Q And as a DNA analyst, can you tell the jury
18 what you do?

19 A Yes, well I -- at the crime lab in the DNA
20 section.

21 THE COURT: Ms. Pierce, don't worry
22 about the microphone. Just adjust the chair and make
23 yourself comfortable. And if we can't pick it up,
24 we'll turn it louder. Don't concern yourself with
25 the microphone.

1 THE WITNESS: Okay.

2 THE COURT: Okay. Go ahead, just leave
3 it.

4 You may proceed.

5 Q (BY MS. DAVIDSON) What do you do as a DNA
6 analyst?

7 A As a DNA analyst, I receive evidence that
8 has possible biological material. I screen that
9 evidence for bodily fluids and determine if it was
10 suitable for DNA testing. If it is, we perform DNA
11 testing on the sample.

12 I write reports based on conclusions
13 from our analysis, and I also review the work of my
14 peers. I testify in court, if need be on those
15 reports.

16 Q Can you give the jury the benefit of your
17 educational background, that allows you to hold that
18 position with the Medical Examiner's office?

19 A Yes. I have a Bachelor's of Science Degree
20 in Microbiology, from the University of Illinois.
21 I've a Master's of Science Degree in Forensic
22 Science, from Sam Houston University -- Sam Houston
23 State University. And I'm also certified as a
24 molecular biologist by the American Board of
25 Criminalistics.

1 Q Tell the jury what DNA is?

2 A DNA is short for a long word,
3 deoxyribonucleic acid. It is your genetic material.
4 It's found in every cell -- almost every cell in your
5 body. And it is what we call the instructions for
6 life. Because it is instructing a body how to grow and
7 perform the daily functions. And it's what makes you
8 human. It's what makes you you. It's also what
9 makes you unique. And it's passed down from your
10 parents. You have half your DNA from your mother and
11 half your DNA from your father.

12 Q Do any two people have exactly the same DNA
13 pattern?

14 A You should not have the same DNA as somebody
15 else unless you are an identical twin. So, unless
16 you're an identical twin your DNA is unique to you.

17 Q Can you kind of explain to the jury how you
18 go about looking for DNA on evidence that is brought
19 to you from say a crime scene?

20 A DNA is found in cells of your body, and
21 cells are in bodily fluids mostly. So, as I said
22 before, we usually screen evidence first because
23 we're looking for those bodily fluids that have a lot
24 of DNA. And those fluids are things such as blood,
25 semen, saliva. There's DNA in your hair, in your

1 bones, on your teeth, pretty much anything.

2 There's also DNA in -- released by the
3 sweat of your hands. So, it's called touch DNA or
4 contact DNA. So, also just from having contact with
5 an item you're shedding DNA. So, because people
6 leave behind DNA when they have contact with
7 something, we screen for those kinds of fluids. And
8 we go from there to determine if there could be DNA
9 on those items.

10 Q How do you screen for those types of fluids?

11 A Well, I can tell you that we screen mostly
12 for blood in violent crimes. For blood we have
13 what's called presumptive and confirmatory testing.

14 Presumptive testing is our preliminary
15 tests. They're usually not very specific but they're
16 very sensitive. So, they will detect anything that
17 possibly have characteristics of blood. And if
18 that's positive, then we'll move onto confirmatory
19 testing. And those kinds of tests confirm what it
20 is. So we usually go -- use those two kinds of
21 tests.

22 Q And when -- you said, if it's a violent
23 crime you're looking for blood. How do you screen
24 for other bodily fluids? I think you said touch DNA
25 and stuff like that?

1 A Well, if it's something that we think has
2 touch DNA, we don't have a screen method for that.
3 You can't see it and it's very abundant. So, if it's
4 something that we suspect could have touch DNA, like
5 an item that is usually handled a lot, we'll actually
6 just send it directly to DNA and we will not -- we'll
7 skip the screening part.

8 Q Okay. And when you say, "Send it directly,"
9 you're saying send the item directly to DNA?

10 A No. We will take a small cutting of the
11 item, depending on what it is, or a scraping. We'll
12 take a portion of the item only, a very small amount.
13 Because you don't need that much for a DNA testing
14 today. And we don't want to, what's called, consume
15 the item. We don't want to use everything up,
16 because we need to save it for later in case some
17 more testing is indicated. So, we only take a very
18 small cutting of the items we get for DNA.

19 Q Were you given some items to analyze
20 concerning a homicide that occurred against a
21 Ms. Joyce Owens and Alberta Walker?

22 A Yes.

23 Q Okay. When it comes into the Medical
24 Examiner's office, first do y'all assign it any
25 particular number?

1 A Yes.

2 Q Okay. And tell the jury about how you go
3 about assigning a number?

4 A All evidence pertaining to the same case is
5 given what's called a lab number when it comes
6 through our lab. So, we assign each case a unique
7 lab number.

8 Q And in this case, what was the unique lab
9 number that you assigned to the evidence that you
10 received?

11 A JAJ-08-004686.

12 Q Can you tell the jury what items it was that
13 you received in the crime lab that were given that
14 specific lab number?

15 A Yes. There were a lot of items. Shall I
16 list them off?

17 Q Yes, please.

18 A The items we received were -- first of all,
19 we received several items of clothing: Gray
20 sweatpants, blue jeans, brown belt, yellow T-shirt,
21 white tank top, two white socks, a right and a left
22 shoe.

23 We then received a series of swabbings
24 collected at the scene. And they were from various
25 places around the house such as in a bedroom or a

1 kitchen. There was also some swabbings of two
2 knives.

3 There were two cigarette butts
4 submitted. There was a pillow and a blanket.

5 Q When you get those items into the lab and
6 assign them that lab number, how do you go about
7 processing those particular items for DNA?

8 A Well, we process each item separately and
9 individually. And we -- as the items get submitted,
10 because sometimes the items may not come all at once.
11 But as the items get submitted, we will determine
12 what is -- what is appropriate for this kind of a
13 case and this kind of evidence.

14 So, again, usually we screen for blood
15 in this case, or determine if maybe it should go
16 straight to DNA, and then it gets processed for DNA.

17 MS. DAVIDSON: May I approach the
18 witness, Judge?

19 THE COURT: You may.

20 Q (BY MS. DAVIDSON) First of all, I'm going to
21 show you some items that are already introduced into
22 evidence. State's Exhibit No. 137 and State's
23 Exhibit No. 138. These are two knives. Are these
24 the two knives that you were given to process for
25 DNA?

1 A No. We received the swabbings taken from
2 the knives.

3 Q So, you never actually tested the two
4 knives?

5 A Correct.

6 Q Just the swabbings?

7 A Correct.

8 Q Okay. I'm going to show you what's in
9 evidence as State's Exhibit No. 136, the contents of
10 it. I'd like you to take a look in there and see if
11 those were the swabbings that you received in this
12 particular case to determine whether there's DNA?

13 A Yes.

14 Q And what is that?

15 A This is a envelope containing the swabs for
16 the person, batch, and number three.

17 Q Okay. And you know that for what reason?

18 A It has our unique initials -- lab number and
19 initials of the analyst.

20 Q Okay. And do y'all put that on there when
21 it gets to the lab?

22 A Yes.

23 Q What is that?

24 A That is the envelope containing the bathroom
25 sink swabs.

1 Q Okay. And same question as to the one
2 before, is this something you know came to your lab
3 because of the lab number that's on it?

4 A Yes.

5 Q Okay. This envelope says swab of broken
6 handled knife. Is that what you received?

7 A Yes.

8 Q This is the swab of the wooden handled
9 parenthesis knife. Is this what you received?

10 A Yes.

11 Q The swab of the broken blade of the knife.
12 Did you receive this item in the lab?

13 A Yes.

14 Q DNA swab of purse in the bedroom number one.
15 Did y'all receive this in the lab?

16 A Yes.

17 Q Blood swab of wall above the headboard in
18 bedroom number one. Did the lab receive this item?

19 A Yes.

20 Q Blood swab, dust ruffle of bed in bedroom
21 number one. Did the lab receive this item?

22 A Yes.

23 Q DNA swab of Theron Owens. Did y'all receive
24 this in the lab?

25 A Yes.

1 Q Blood swab, kitchen pantry door. Did you
2 receive this in the lab?

3 A Yes.

4 Q Okay. Blood swab, wall behind love seat in
5 living room. Did you receive this in the lab?

6 A Yes.

7 Q Blood swab, headboard in bedroom number one.
8 Did you receive this in the lab?

9 A Yes.

10 Q Blood swab, wall next to pantry door in
11 kitchen. Did you receive this in the lab?

12 A Yes.

13 Q Blood swab, kitchen floor in front of
14 dishwasher. Did you receive this in the lab?

15 A Yes.

16 Q Blood swab, magazine on end table next to
17 bed in bedroom number one. Did you receive this swab
18 in the lab?

19 A Yes.

20 Q Blood swab, kitchen counter next to stove.
21 Did you receive this in the lab?

22 A Yes.

23 Q Swab of blade of wooden handled knife. Did
24 you receive this in the lab?

25 A Yes.

1 Q And blood swab, carpet next to bed in
2 bedroom number one. Did you receive this in the lab?

3 A Yes.

4 Q Now, at some point did your lab also receive
5 something from the Medical Examiner's office,
6 pertaining to Alberta Walker and Joyce Owens, so you
7 could determine what their DNA profile was?

8 A We did.

9 Q Okay. And what do you get from the ME's
10 office that allows you to do that?

11 A We receive known blood from the two
12 decedents.

13 Q Okay. And that is taken during the autopsy?

14 A Correct.

15 Q So, tell the jury, once you get the swab --
16 the known blood from Alberta Walker and the known
17 blood from Joyce Owens. And then at some point you
18 received a DNA swab from Theron Owens. What do you
19 do first in order to determine if any three of those
20 people DNA would appear on any of the items that have
21 been given to you to analyze?

22 A Okay. Well, when we receive evidence and do
23 submit it for DNA, we develop what's called a DNA
24 profile from each item of evidence. And we then --
25 if we have samples for reference from individuals

1 involved in the case, such as decedents, or
2 complainant, or suspects. We will then develop their
3 DNA profiles to see what those results are.

4 And DNA is actually a comparative test.
5 You need to compare two profiles and see if they're
6 consistent. And if one person's profile is
7 consistent with the profile on the item of evidence,
8 you can then conclude that that person could have
9 possibly contributed that DNA. If it's not
10 consistent, we say that they are excluded. Meaning
11 they did not contribute that DNA. So, it's a
12 comparative test.

13 Q And what -- and how do you go about making
14 this comparison, when you say you've raised the
15 profile. Can you explain that to the jury, what you
16 see and what you're looking at to know let's say, for
17 example, the defendant's profile?

18 A Sure. Our DNA profile for forensic purposes
19 today, we're looking at a very small portion of our
20 DNA. Because human DNA is actually over 99 percent,
21 is going to be the same, because that's what makes
22 you human. Less than one percent is different from
23 person to person. And that's the part that makes you
24 unique.

25 And the areas that make you different

1 are called short tandem repeats or STRs for short.
2 And we are actually focusing in on those STRs of the
3 DNA. And we are detecting the gene markers, or
4 alleles, for locations on those STRs and determining
5 your gene type at each location.

6 We only test actually at this 13
7 areas -- 13 STRs. And we develop the markers at each
8 location. So we are looking at gene markers at those
9 13 locations of the evidence. And then we're looking
10 at those 13 gene markers for the people whose DNA
11 profiles we're developing and seeing if those markers
12 match.

13 Q And why are you only looking at 13 markers?

14 A Because those markers have been determined
15 to be highly variable from person to person.

16 Q Okay. So, if I understand this correctly,
17 you've got 13 markers of a profile that would be the
18 defendant's, Alberta Walker's and Joyce Owens',
19 correct?

20 A Correct.

21 Q Then you take the physical evidence that
22 comes from the scene and look at those same 13
23 markers on each piece of evidence, to see if either
24 one of those three people left behind their DNA on
25 that evidence; is that correct?

1 A Correct.

2 Q Okay. Now, let's go through these swabs
3 that you received first.

4 Okay. Tell the jury on this envelope,
5 and I'm going to be doing it with the contents of
6 State's 136, what were your findings of the swab with
7 the -- let me get this over here to help me. The
8 swab of the blade of the wooden handled knife?

9 A So, that was our Item 24.

10 Q Yes, ma'am. Item 24.

11 A Yes. Those swabs, we performed a
12 presumptive test for blood which was positive. And
13 when we performed DNA testing, there was a mixture of
14 DNA. Meaning there was more than one person
15 contributing. Ms. Owens was consistent as being a
16 major contributor to that mixture.

17 Q Let me -- let me stop you there. When you
18 call something a "major contributor," what do you
19 mean?

20 A When we have a mixture of DNA, sometimes we
21 can call this mixture a major-minor mixture. Which
22 means that even though there is two people or more
23 contributing, we could tell that somebody contributed
24 more DNA in this instance, 60 percent or more. And
25 we can pick out their profile as being stronger in

1 signal.

2 So, in this instance Ms. Owens was
3 considered a major contributor, because there was
4 more of the DNA consist with hers in that mixture.

5 Q Okay. Did you find out anything else on
6 your item number 24?

7 A Yes. Ms. Walker and Mr. Owens could not be
8 excluded as what we call in the minor contributor of
9 those items.

10 Q And when you say, "Cannot be excluded," can
11 you tell the jury what do you mean?

12 A We usually in which substances cannot be
13 excluded or included, meaning that their profiles
14 were consistent with the profiles of the evidence.
15 So, they could have possibly contributed DNA to that
16 mixture.

17 Q Okay. And if I -- I'm just trying to
18 understand it in my own head. Looking at the 13
19 markers from, say, the defendant, Ms. Walker, and
20 Ms. Owens, now you've looked at the swab of the blade
21 of the wooden handled knife and the same 13 markers,
22 and what you see very possibly could be the
23 defendant's DNA and Alberta Walker's DNA, correct?

24 A Yes, they -- they possibly could have
25 contributed.

1 Q And Joyce Owens, hers is there because she's
2 the major contributor, correct?

3 A She's consistent with being a major
4 contributor, correct.

5 Q On this blade of this wooden handled knife,
6 did you find anything that indicated to you that
7 there could have been someone else outside of those
8 three people's DNA on it?

9 A On this item, all the alleles that we
10 detected were consistent -- could have come from
11 either of the three people I had reference samples
12 from. There was one foreign allele that neither --
13 that the three of those people did not have. But
14 other than that, it was consistent with those three
15 people.

16 Q Okay. When you say one foreign allele out
17 of the 13 markers, were all three that you find on
18 the wooden handled knife, you find one marker that's
19 inconsistent with their DNA on this only, correct?

20 A Correct, one gene allele.

21 Q And would one ever be enough to determine
22 who's DNA that is?

23 A No.

24 Q Did you find anything on your item number
25 12, which is the blood swab, magazine on end table

1 next to bed in bedroom number one?

2 A Yes.

3 Q What did you find?

4 A The magazine swabs were presumptively
5 positive for blood. When we performed the DNA test
6 it was consistent with Ms. Owens. So, she was
7 included as being a contributor of that stain. And
8 then I developed statistics to give weight to that
9 evidence.

10 Q Okay. First of all, let me ask you this.
11 It was consistent with Ms. Owens. Did you find
12 either the defendant's or Ms. Walker's DNA on the
13 magazine in bedroom number one?

14 A No.

15 Q Okay. And when you say you do statistics,
16 tell the jury about that.

17 A When we have what's called an inclusion,
18 meaning I cannot exclude somebody, I develop a
19 calculation and I show statistics to show how rare or
20 common that DNA profile is in the population.

21 And we do this because we -- first of
22 all, it's a comparative test, so I did receive swabs
23 from the people involved in this case; however, we do
24 not have a DNA profile of everybody in the country or
25 the world. So, I have no way of knowing if somebody

1 out there was a genetic twin to people I have.

2 So, we develop statistics to show how
3 rare or common this profile is in the population.
4 And if it's what is called single source profile,
5 meaning only one person contributed, it will be a
6 very rare profile.

7 Q Okay. And what did you come up with on the
8 magazine?

9 A So, the frequency of the profile found on
10 the magazine was 1 in 277 quintillion, 200
11 quadrillion for Caucasians; 1 in 10 quintillion, 80
12 quadrillion for African Americans; 1 in 22
13 quintillion, 820 quadrillion for Hispanics.

14 Q Your item number 11, the blood swab, carpet
15 next to bed in bedroom number one, what were your
16 findings on that?

17 A For the carpet swabs there was a
18 presumptively positive test for blood. But there was
19 not enough DNA to yield a usable profile, so it was
20 inconclusive.

21 Q Okay. And that was the carpet in bedroom
22 number one?

23 A Yes.

24 Q What about the blood swab, kitchen floor in
25 front of dishwasher? It would have been your item

1 number 17.

2 A It was presumptively positive for blood.

3 Q And what were your findings?

4 A That also yielded a mixture. And in this
5 instance the -- we found that Ms. Walker was
6 consistent with a major -- as being a major
7 contributor to that mixture. So, she cannot be
8 excluded as a possible major contributor. And
9 Ms. Owens and -- I'm sorry, Ms. Joyce Owens and
10 Mr. Theron Owens were excluded.

11 And I developed statistics to show the
12 frequency of that major contributor.

13 Q Which was what?

14 A For the major contributor of the floor
15 kitchen swabs, the frequency was 1 in 10 quadrillion,
16 780 trillion for Caucasians; 1 in 76 quadrillion,
17 450 trillion for African Americans; 1 in 50
18 quadrillion, 530 quadrillion -- I'm sorry, 50
19 quadrillion, 530 trillion for Hispanics --

20 THE COURT REPORTER: Wait a minute.
21 Repeat that last number.

22 THE WITNESS: Sure.

23 THE COURT REPORTER: Fifty
24 quadrillion --

25 THE WITNESS: Fifty quadrillion,

1 530 trillion for Hispanics.

2 THE COURT REPORTER: Thank you.

3 Q (BY MS. DAVIDSON) There was a swab of -- a
4 blood swab, kitchen counter next to stove, your item
5 number 18. What were your findings?

6 A That was presumptively positive for blood,
7 and the DNA results were that the profile was
8 consistent with Ms. Walker. So, she cannot be
9 excluded as a possible source of that stain.

10 And then I developed statistics for
11 that.

12 Q Okay. Did you -- and this blood in the
13 kitchen, what about Joyce Owens or the defendant?

14 A They were excluded.

15 Q There was a blood swab in the wall next to
16 the pantry door in the kitchen, your item number 16.

17 A That was the same result as the previous
18 item. It was a presumptive test that was positive
19 for blood, and it was also consistent with
20 Ms. Walker. So, she cannot be excluded as a possible
21 source of that stain.

22 Q Okay. What about Joyce Owens or the
23 defendant?

24 A They were excluded.

25 Q There was a blood swab in headboard in

1 bedroom number one. Your item number 14. I
2 apologize.

3 A Yes. That item was presumptively positive
4 for blood. It was consistent with Ms. Joyce Owens,
5 so she cannot be excluded as the possible source of
6 that stain. Mr. Owens and Ms. Walker were excluded.
7 And I developed statistics to show the frequency of
8 that profile.

9 Q Okay. Can you tell the jury what those
10 were?

11 A Yes. That was 1 in 277 quintillion, 2
12 quadrillion for Caucasians; 1 in 10 quintillion, 80
13 quadrillion for African Americans; 1 in 22
14 quintillion, 820 quadrillion for Hispanics.

15 Q Okay. Blood swab in wall behind the love
16 seat in the living room. It will be your item number
17 20.

18 A That was a presumptive test that was
19 positive for blood. It was consistent with
20 Ms. Walker. And Ms -- and Ms. Owens and Mr. Owens
21 were excluded.

22 And those statistics were the same as
23 item 16.

24 Q Okay. Your item number 15, a blood swab
25 from the kitchen pantry door.

1 A That also had a stain that was presumptively
2 positive for blood. It yielded a mixture for DNA.
3 The major contributor of that mixture we found was
4 consistent with Ms. Walker. And then Ms. Owens could
5 not be excluded as a possible minor contributor to
6 that mixture. Mr. Owens was excluded.

7 And I developed different statistics
8 for the major and minor components of that mixture.

9 Q Okay. Item -- your item number 13, the
10 blood swab from the dust ruffle of the bed in bedroom
11 number one.

12 A That was presumptively positive for blood.

13 Q And your findings?

14 A It was consistent with Ms. Joyce Owens. She
15 cannot be excluded as a possible source of that
16 stain. Ms. Walker and Mr. Owens were excluded.

17 Q Blood swab from the wall above the headboard
18 in bedroom number one. That would be your item
19 number 10.

20 A Again, the presumptive test for blood was
21 positive. It was consistent with Ms. Joyce Owens.
22 She cannot be excluded as a possible source of that
23 stain. Ms. Walker and Mr. Owens were excluded.

24 Q Your item number 21. There was a DNA swab
25 of the purse that was found in bedroom number one.

1 Can you tell the jury what your findings were?

2 A Yes, that presumptive test for blood was
3 negative. We developed a DNA profile consistent with
4 Ms. Joyce Owens. So, she cannot be excluded as being
5 a contributor. And Ms. Walker and Mr. Owens were
6 excluded.

7 Q There was a DNA swab of the purse found in
8 bedroom No. 3, your item number 22.

9 A This test was negative for presumptive --
10 presumptive test for blood. It was a mixture.
11 Ms. Joyce Owens, Ms. Alberta Walker, and Mr. Owens
12 could not be excluded as being possible contributors
13 to that mixture.

14 Q Swab of the broken handled knife, your item
15 number 25.

16 A This was positive presumptively for blood.
17 This also was a mixture. The major contributor was
18 consistent with Ms. Alberta Walker's profile. So,
19 she cannot be excluded as a possible major
20 contributor. Mr. Owens and Ms. Joyce Owens could not
21 be excluded as possible minor contributors.

22 Q And did you say -- and I just may have
23 missed it, whether or not the presumptive test for
24 blood was positive or not on that one?

25 A On that one it was positive.

1 Q Okay. So when you get a result that's
2 negative for blood, it could be the swab contained
3 maybe the touch DNA and that's why you were able to
4 raise a profile?

5 A Correct.

6 Q Like on the swabs of the purses. It was
7 negative presumptive for blood, but you found some
8 DNA, correct?

9 A Correct. That is possibly from just the
10 daily contact with the purse, that DNA was shed
11 through skin.

12 Q The swab of the wooden handled knife, your
13 item number 23.

14 A That was presumptively negative for blood.
15 It was a mixture. And Ms. Joyce Owens, Ms. Alberta
16 Walker, and Mr. Owens could not be excluded as being
17 contributors to that mixture.

18 Q The swab of the broken blade of the knife,
19 your item number 26.

20 A The presumptive test for blood was positive.
21 It yielded a mixture of DNA. A major contributing
22 profile was consistent with Ms. Alberta Walker. And
23 Ms. Joyce Owens and Mr. Owens were excluded from that
24 mixture.

25 Q And that was the broken blade, swab number

1 26.

2 A Yes.

3 Q And finally there was a blood swab submitted
4 to you that was from the bathroom sink, item number
5 19.

6 A That also was presumptively positive for
7 blood. It had a mixture where the major contributing
8 profile was consistent with Ms. Walker. And so she
9 could not be excluded as a possible major
10 contributor. Mr. Owens and Ms. Joyce Owens could not
11 be excluded as possible minor contributors to that
12 mixture.

13 Q So that was a mixture, correct.

14 A And all of these mixtures, I calculated
15 statistics to go with those resulting profiles.

16 Q Okay. In the bathroom sink, can you tell
17 the jury what your calculations were?

18 A Yes. For the bathroom sink the major
19 contributing profile, that was consistent with
20 Ms. Walker. The frequency of that profile is 1 in 10
21 quadrillion, 780 trillion for Caucasians; 1 in 76
22 quadrillion, 450 trillion for African Americans; 1 in
23 50 quadrillion, 530 trillion for Hispanics.

24 For the minor component, for which
25 Ms. Joyce Owens could not be excluded, that was 1 in

1 538 for Caucasians, 1 in 1,404 for African Americans,
2 1 in 661 for Hispanics.

3 And I have one more set of statistics,
4 for what was consistent with Mr. Owens' profile of
5 not being excluded as the minor component. And that
6 is 1 in 403 for Caucasians; 1 in 1,483 for African
7 Americans; and 1 in 276 for Hispanics.

8 Q Okay. Did you test some other items of,
9 say, clothing, or -- or physical items that were
10 actually received in the DNA lab?

11 A Yes, we did.

12 Q Can you tell the jury what those items were
13 that were actually received?

14 A Two cigarette butts, and then the blanket,
15 and then the clothing items, which were the
16 sweatpants, the blue jeans, the belt, the yellow
17 T-shirt, the tank top, the socks and the shoes. I'm
18 sorry, there was also a pillow.

19 Q Okay. Let's start with State's Exhibit
20 No. 133. It's a blanket. Would you take a look at
21 133 and tell me if you recognize 133 as the blanket
22 that you analyzed in the DNA lab?

23 A That is the blanket we received in the DNA
24 lab.

25 Q Do you do anything with a physical item like

1 this to start determining whether or not somebody's
2 DNA is on it?

3 A Yes.

4 Q What do you do with it?

5 A For this blanket, we wanted to see if there
6 was possible blood. So, we visually -- we first look
7 and see if there are any reddish-brown stains. And
8 those get circled so we can perform presumptive blood
9 testing.

10 Q And can you on this Exhibit State's 133,
11 show the jury where you would have put your circles?

12 A First, I think the officers on the scene
13 also made circles, so there's two sets of circles.

14 Q Okay.

15 A So, as you see in -- this is stain B in this
16 third envelope, there would be one that's stain B.

17 Q And that was something you would have put on
18 there?

19 A Yes.

20 Q And did you photograph this item while it
21 was in your custody in the DNA lab?

22 A Yes.

23 Q Okay. I'm going to show you what I marked
24 for identification purposes as State's Exhibit
25 No. 197 -- 195 through 197. I'd like you to take a

1 look at those and tell if you recognize those.

2 A Yes.

3 Q Do these photographs fairly and accurately
4 depict the blanket as you were analyzing it in the
5 DNA lab?

6 A Yes.

7 MS. DAVIDSON: Your Honor, at this time
8 I'd like to offer into evidence State's 195 through
9 197, and tender to counsel for her inspection.

10 THE COURT: All right.

11 MS. LYTLE: We have no objection, Your
12 Honor.

13 THE COURT: All right. State's 195
14 through 197 are admitted.

15 (State's Exhibit Nos. 195 through 197
16 were admitted.)

17 Q (BY MS. DAVIDSON) I'm going to put these up
18 on the monitor, Ms. Pierce, and I want you to tell
19 the jury what we're looking at. This is State's
20 Exhibit No. 195. Would you explain this picture to
21 the jury, please?

22 A Sure. This is just one side of the blanket
23 and so you see in black the circles. And the notes
24 are -- is written "vis" for the visible color and in
25 parentheses what it was. So vis red, or vis

1 red-brown, or vis red-orange, what could possibly be
2 a discoloration due to a blood stain.

3 And then we have the Ph result. Ph is
4 short for phenolphthalein, which is our presumptive
5 test for blood and the result. So, as you see in the
6 corner there is a positive and the letter A, so that
7 positive result we labeled that stain A.

8 The other two circles you see, a circle
9 with a slash. And that means the test was negative.
10 So those two stains were negative for blood. So on
11 this picture we only see stain A.

12 Q Okay. And when you get a positive for the
13 presumption of blood stain A, what do you do with the
14 stain A?

15 A That stain we actually performed
16 confirmatory testing. So, we confirmed that that
17 stain was blood, and then we cut a little portion of
18 that stain for DNA.

19 Q Okay. State's Exhibit Number 196.

20 A That's the outside of the blanket.

21 Q Explain to the jury what they're seeing in
22 that photograph of it.

23 A Again, we see the various black circles for
24 what was possibly blood stains. And it's the same
25 description we have of vis, and whatever the staining

1 was, and then the result of the presumptive tests.

2 And as you see in green, we have stains
3 B, C, and D. Those were some of the positive
4 presumptive stains and we -- we label some stain that
5 we tried to take reference sampling from the whole
6 item. Because as you see, there was a lot of stains
7 that possibly could have had blood and we try to take
8 a representative of the item.

9 Q Okay. And when you say, "A representative
10 of the item," what do you mean?

11 A I mean that if there was, for example, eight
12 stains, we would probably take two or three of them.
13 And we cut portions of those stains for DNA.

14 Q Okay. And State's Exhibit No. 197. What
15 does the jury see there?

16 A That is the other side of the outside of the
17 blanket.

18 Q Okay. And did you find any positive for
19 presumption of blood or any stains on this side?

20 A Yes. As you see, there are some circles
21 in -- in black on one side. Most of those are
22 negative. There were a few positive. And then we
23 decided to cut stain E, which is on the bottom. That
24 was presumptive test positive.

25 Q So, stains you took were A, B, C, D and E,

1 correct?

2 A Yes.

3 Q Okay. And did you do DNA testing on those
4 items?

5 A Yes.

6 Q And can you tell the jury what the results
7 were of your DNA testing on the blanket?

8 A Sure. Stain A was a stain that was
9 consistent with Ms. Joyce Owens. Ms. Owens could not
10 be excluded as a contributor of that stain. Stain B,
11 there was not enough DNA and we could not amplify it
12 for DNA.

13 Q What does that mean?

14 A It means that although it might have tested
15 positive for blood, it was a small stain and there
16 was not enough DNA to yield a full profile --

17 Q Okay.

18 A -- or any profile. So, there's no
19 comparison to make.

20 Q Okay.

21 A Stain C also yielded a -- what's called a
22 partial profile. Meaning there was not a lot of DNA.
23 We did develop a profile, but it was not a full
24 profile. And we could tell that Ms. Walker and
25 Mr. Owens were excluded. We saw there were possibly

1 some consistencies with Ms. Joyce Owens, but not
2 enough information. So that comparison was
3 inconclusive.

4 Q Okay. Let me ask you this: When you say,
5 "Not enough and we developed a profile," when -- when
6 you develop a profile, is that at all 13 of those
7 markers? Or you don't have 13 markers to say it's a
8 complete profile?

9 A Okay. So, we try to detect DNA at each
10 marker. We always test for those 13. When there's
11 not enough DNA though, sometimes no DNA comes up at
12 those markers. And that's what's called a partial
13 profile, when you only have some DNA. And the less
14 markers you have the harder it is to make a
15 comparison.

16 Q But we know based on what you had there,
17 that Ms. Walker was excluded and the defendant was
18 excluded. You just didn't have enough to say for a
19 fact Ms. Owens was included; is that right?

20 A Correct. We couldn't say if she was
21 included or excluded.

22 Q Okay. What else?

23 A And then stain D was also consistent with
24 Ms. Owens. Ms. Walker and Mr. Owens were excluded
25 from stain D. And then stain E was a mixture, with a

1 major component consistent with Ms. Joyce Owens. She
2 cannot be excluded as a possible major contributor.
3 And then Ms. Walker and Mr. Owens were also excluded
4 from that mixture.

5 Q So, from your findings, the blanket had
6 Joyce Owens' DNA on it some -- in some places, but
7 Alberta Walker and the defendant were excluded on the
8 blanket?

9 A Alberta Walker and Mr. Owens were excluded.
10 The DNA we detected was consistent with Ms. Joyce
11 Owens. So, she could have possibly donated that DNA.

12 Q Okay. Now, you said you tested a pillow?

13 A Yes.

14 Q Okay. Can you tell the jury what your
15 findings were on the pillow?

16 A Yes. We detected blood on the pillow. We
17 had two stains on the pillow that were tested. And
18 they were both consistent with Ms. Walker. So, she
19 cannot be excluded as the possible source of those
20 stains.

21 Q Any findings as to Ms. Owens or the
22 defendant?

23 A Ms. Owens and the defendant were excluded
24 from those stains.

25 Q You said you tested some I think cigarette

1 butts, as well?

2 A Yes.

3 Q How many?

4 A Two.

5 Q And can you tell the jury what your findings
6 were on the cigarette butts?

7 A Yes. The cigarette butts had stains that
8 both tested positive for blood. And before sending
9 to DNA, the cigarette butts were swabbed separately
10 to swabs, to get some of the blood stain off, and
11 that was sent to DNA.

12 And then also the mouth part of both
13 cigarette butts were cut, to see where possibly
14 saliva of the smoker was, to see that DNA profile.
15 So, two cuttings of DNA from each cigarette butt.

16 Q And what were your findings?

17 A Cigarette butt number one, the -- let me
18 check my notes. I want to make sure I get this
19 accurately.

20 So, the swabbing of the stain -- the
21 presumptive blood stain on the first cigarette was
22 consistent with Ms. Walker. So, she cannot be
23 excluded as a source of that stain. And then
24 Mr. Owens and Ms. Joyce Owens were excluded.

25 For the -- one -- the cutting of the

1 mouth area of that cigarette was a mixture. The
2 major component was consistent with Ms. Walker. And
3 Mr. Owens and Ms. Owens were excluded.

4 For the cigarette butt number two, it
5 was also consistent with Ms. Alberta Walker. And
6 Mr. Owens and Ms -- Mr. Owens and Ms. Joyce Owens
7 were excluded.

8 Q And I believe you testified that you tested
9 a white tank top for DNA; is that correct?

10 A Yes.

11 Q I'm going to show you what's in evidence as
12 State's Exhibit No. 128. Is this the white tank top
13 that you tested for DNA?

14 A Yes.

15 Q Tell the jury how you know it's the same
16 tank top?

17 A There is an indicator of our unique lab
18 number on this tab.

19 Q On this Exhibit, did you find anything that
20 you believed to be blood or anything that you marked?

21 A Yes.

22 Q And show the jury what?

23 A We circled in black the possible blood
24 stains. And then you see there is a cutting from
25 this circle. And then one on back, there's a cutting

1 here. So, those were the two stains we took for
2 DNA.

3 Q And did you photograph the white T-shirt
4 while it was in your care, custody and control?

5 A The tank top, yes.

6 Q I mean, the tank top.

7 I'm going to show you what I marked for
8 identification purposes as State's No. 194. Does
9 this photograph fairly and accurately depict the way
10 you saw this T-shirt in the DNA lab?

11 A Yes.

12 MS. DAVIDSON: Your Honor, at this time
13 I'm going to offer into evidence State's Exhibit
14 No. 194.

15 THE COURT: All right.

16 MS. DAVIDSON: And tender it to counsel
17 for her inspection.

18 MS. LYTLE: We have no objection, Your
19 Honor.

20 THE COURT: All right. State's 194 is
21 admitted.

22 (State's Exhibit No. 194 was admitted,)

23 Q (BY MS. DAVIDSON) I'm also going to place
24 this on the monitor, so you can explain to the jury
25 what they're seeing.

1 All right. Ms. Pierce, can you tell
2 the jury what it is that they see in State's Exhibit
3 No. 194?

4 A That is two photographs of the outside front
5 and the outside back of the tank top. And the
6 circles show the presumptive testing.

7 Q Okay. Did you find blood on that?

8 A Yes. Stain A, which is in the corner of the
9 first picture in the top corner. You see in green
10 there's stain A. That was presumptively positive for
11 blood. And then we confirmed it to show that it was
12 indeed blood. We took a cutting from that stain.

13 There are two other -- there are three
14 other circles on that particular side. Two were
15 positive and one was negative. We did take cuttings
16 from that, because it looked like the same blood
17 staining as the stain A.

18 And then on the back, you see a single
19 circle which is stain B. Again, that was positive
20 for presumptive testing, so we took a cutting of that
21 for DNA.

22 Q And can you tell the jury what your findings
23 were on the white tank top?

24 A Yes. The first stain, stain A, was a
25 mixture. And the major contributing profile was

1 consistent with Ms. Walker. And Mr. Owens and
2 Ms. Joyce Owens could not be excluded as possible
3 minor contributors.

4 And then for stain B, it was a mixture
5 where we could not determine a major contributor.
6 But all three individuals could not be excluded as
7 being possible contributors.

8 Q Okay. And I believe you testified that you
9 also did some DNA testing on a pair of gray
10 sweatpants?

11 A Correct.

12 Q I'm going to show you the packaging, even
13 though they're marked separately. And I'm going to
14 pull them out of what has been marked as and admitted
15 as State's Exhibit No. 131. I'd like you to take a
16 look at this and tell me if these are the sweatpants
17 that you tested for DNA?

18 A Yes, those are the sweatpants we received in
19 our lab.

20 Q And again, the circles. Where did those
21 come from?

22 A That was from the analyst circling the
23 stains that were possibly blood.

24 Q Did you photograph 131, just like you did
25 the other clothing?

1 A Yes.

2 Q I'm going to show you what I marked for
3 identification purposes as State's Exhibit's No. 193.
4 I'd like you to take a look at that, and does that
5 fairly and accurately depict the sweat pants as you
6 photographed them in the lab?

7 A Yes.

8 MS. DAVIDSON: Your Honor, at this time
9 I'd like to offer into evidence State's Exhibit
10 No. 193, and tender to Ms. Lytle for her inspection.

11 MS. LYTLE: I have no objection, Your
12 Honor.

13 THE COURT: All right. State's 193 is
14 admitted.

15 (State's Exhibit No. 193 was admitted.)

16 Q (BY MS. DAVIDSON) This picture is a little
17 bit dark.

18 (Attorneys confer.)

19 Is that better or worse? Does that
20 help a little bit or not, Ms. Pierce?

21 A The first way is better, I think.

22 Q First one is better. There?

23 A That's a little better.

24 Q Okay. Why don't you tell the jury what they
25 see in State's Exhibit No. 193?

1 A Yes. It is a little dark on top, but it is
2 the picture of the outside front of the sweatpants.
3 And it is the same manner as the other items. You
4 see a lot of circling of the possible blood stains.

5 You see the vis, the staining, and then
6 the pH results. And the -- you can see in the
7 bottom, you can probably see stain C. That's on one
8 of the legs.

9 Q Okay.

10 A That stain was presumptively positive for
11 blood. And then there's two stains towards the top,
12 A and B, that again were both presumptively positive
13 for blood. And stain A we confirmed to be blood so
14 we took cuttings of stains A, B, and C.

15 Q Okay. Can you tell the jury what the
16 results were of your findings of stains A, B, and C?

17 A Sure. Stains A and -- stains A and C were
18 consistent with Ms. Alberta Walker. She cannot be
19 excluded as the possible source of those stains. And
20 then Ms. Joyce Owens and Mr. Owens were excluded from
21 those stains.

22 Stain B was a mixture, where Ms. Joyce
23 Owens could not be excluded as a major contributor.
24 And then Ms. Walker was excluded. Mr. Owens could
25 not be excluded as a possible minor contributor.

1 And again, I developed statistics for
2 those results.

3 Q Now, if you would I'd like you to look at
4 State's Exhibit No. 127 and tell me if my markings on
5 that are consistent with what you just testified to
6 in front of the jury?

7 A I need a few seconds to review.

8 Q Yes -- yes, ma'am.

9 A What is this one?

10 Q Sorry. That was the blood behind the love
11 seat in the living room.

12 A Okay.

13 (ATTOORNEYS CONFER.)

14 A Yes, it appears to be accurate.

15 Q Okay.

16 MS. DAVIDSON: Your Honor, at this time
17 I'd like to offer into evidence State's Exhibit
18 No. 127 and tender it to Ms. Lytle for her
19 inspection.

20 (ATTOORNEYS CONFER.)

21 MS. LYTLE: Your Honor, we have no
22 objection.

23 THE COURT: All right. State's 127 is
24 admitted.

25 (State's Exhibit No. 127 was admitted.)

1 Q (BY MS. DAVIDSON) Let me put this on the
2 screen so we can explain what you looked at to the
3 jury, State's Exhibit No. 127.

4 When you looked at this, Ms. Pierce,
5 did you understand that I was putting a check in
6 those locations you said the -- either Joyce Owens,
7 Alberta Walker, or the defendant were included. And
8 an "X" where they were excluded on that item?

9 A Yes.

10 Q And on all the items that you found, or you
11 looked at, with the exception of those two alleles,
12 if I understood that, that didn't match any of the
13 three of the profiles. Everything had either one of
14 the three on those items.

15 That's probably the worst question I
16 have ever asked. Let me try that again:

17 Of all the items you looked at, did you
18 find any DNA profiles that were different than
19 Ms. Owens, Ms. Walker, or the defendant?

20 A There was an item that the -- the swabbings
21 of the purse in bedroom number three, that was
22 presumptively negative for blood. That was a mixture
23 and there were some alleles that were not consistent
24 with any of those three individuals.

25 Q And so that would have been raised through

1 touch DNA, because it was negative for blood?

2 A Correct.

3 Q Anything else?

4 A And then there were two other items where I
5 saw one foreign allele in those -- in those entire
6 profiles. Being one of the cigarette butts, there
7 was an allele that was not consistent with anybody.
8 And then one of the -- I believe it was the -- off of
9 the handle of one of the knives, there was also one
10 allele.

11 Q And one allele tells you what?

12 A If it's a mixture sometimes there is an
13 allele, it depends where it, but sometimes it's -- it
14 means there could be an outside source of DNA, but
15 you -- it's not enough information to say from who or
16 how it got there.

17 Q Do you raise a profile from one allele, or
18 you just see there's an allele that's different from
19 the three that you were looking at?

20 A These are usually cases where we call this a
21 major component and then there's one minor allele.
22 So, from that one minor allele it's basically
23 inconclusive. You -- you -- that's the whole -- I
24 don't know if you can say, "Raise a profile," but
25 it's just one allele out of 13 and you cannot really

1 make a comparison.

2 So, we just usually call those
3 inconclusive. But it was not consistent with any
4 three of those. So that indicated that obviously
5 there was another -- it's a mixture. It can't --
6 it's more than one person contributing.

7 Q So that would be on a knife, a cigarette
8 butt, and the purse in bedroom three?

9 A Yes.

10 Q Only items that you analyzed that had
11 something different from Alberta Walker, Joyce Owens,
12 or the defendant on it?

13 A Correct.

14 MS. DAVIDSON: I'll pass the witness,
15 Judge.

16 THE COURT: All right. You may
17 proceed. Any questions?

18 MS. LYTLE: Yes, may we proceed, Your
19 Honor?

20 THE COURT: You may proceed.

21 MS. LYTLE: Thank you.

22 **CROSS-EXAMINATION**

23 BY MS. LYTLE:

24 Q Good morning, Ms. Pierce.

25 A Good morning.

1 Q My name is Heather Lytle. I'm one of the
2 lawyers representing Mr. Owens in this case. You --
3 when you first came and testified, when you first
4 started your testimony and explained what DNA is, you
5 stated that it's passed down from our parents. Half
6 of my DNA is from my mother and half is from father,
7 correct?

8 A Yes.

9 Q So, are there -- in your findings, in your
10 testing in this case, does it change your statistical
11 analysis at all that the defendant is related to both
12 Alberta Walker and Joyce Owens?

13 A Yes. The statistics I gave were for
14 frequencies in populations of unrelated individuals.
15 And the statistics I give are not for the people that
16 I tested. It's for the evidence. So it is stating
17 that all things even and unrelated, that's how rare a
18 profile would be.

19 And when you have related individuals
20 and the situation, that would alter the possible
21 combinations that would be shared amongst the
22 individuals.

23 Q Okay. So is it possible then in some of
24 your findings where, let's just say for an example,
25 if Ms. Joyce Owens -- if she was considered a

1 major -- a possible major contributor, and Mr. Owens
2 was found not to be excluded from the mixture, is it
3 fair to say that that finding -- now, I'm asking the
4 worst question I could ask in the world. Sorry, I'm
5 going to start over:

6 Is it fair to say that in any of these
7 where Mr. Owens cannot be excluded from a mixture,
8 that that is because he is related to Ms. Owens and
9 Ms. Walker?

10 A I can say that it is not because -- you
11 can't really -- you can't say it is because he is
12 related. But it is true, that it makes it difficult
13 to interpret mixtures when you're dealing with
14 related people. Especially in this case, when there
15 are all three of them that are related.

16 With the major -- with the mixtures
17 with the major components, those components were in
18 higher signal, and you could tell for sure that that
19 was that particular family member. When you're
20 dealing within the minor components, if I think I
21 understand what you're asking, that does -- that is a
22 little harder to interpret because, especially if
23 it's not a two-person mixture but a three person
24 mixture, there might be.

25 Because I think in some items I said

1 one person was the major and the two could not be
2 excluded as the minor. That is a little more
3 difficult to see. But, you know, we look at these
4 profiles very carefully, and they're reviewed by two
5 people after I write my report. And we take into
6 consideration the familial combination.

7 Q But the report that you gave, because you
8 said, you know, your statistical analysis was done
9 for non-related individuals, correct?

10 A Yes.

11 Q Okay. Can you explain to the jury what
12 stochastic effects mean?

13 MS. LYTLE: And, Tammy, that's
14 S-T-O-C-H-A-S-T-I-C.

15 A For sure. Stochastic effect is something
16 that happens when you have a stain that does not have
17 a lot of DNA, it's a low quantity of DNA. And when
18 you amplify the DNA -- when we're trying to develop
19 the DNA profile, not all of the alleles will get
20 detected. Some will get detected and some may not.

21 And I need to explain a little bit of
22 background here so no one is lost. At each locus, at
23 each STR location, you will have two alleles.
24 Because remember one is from your mother and one is
25 from your father. Sometimes they're the same if they

1 happen to give you the same allele. But you have two
2 alleles.

3 And in stochastic effect, if there's
4 not a lot of DNA, one allele will get -- might get
5 detected and one might not. And therefore you might
6 not get the -- all the information, you might be
7 missing some alleles.

8 Q (BY MS. LYTLE) Okay. And what is a
9 stochastic threshold then?

10 A A stochastic threshold is -- depending on
11 what lab you work at, there is a threshold where you
12 will detect DNA. And that's just in our data. We
13 have a threshold where the -- the specific DNA needs
14 to have a high enough frequency -- signal, I'm sorry,
15 signal that will get detected. And that's the
16 threshold above which it will get detected as DNA.

17 Stochastic threshold is a second
18 threshold that above which you can be sure the
19 stochastic effect did not happen. So, let me explain
20 that a little better.

21 If you have an allele that was above
22 both thresholds, it means that there was enough DNA
23 that there should not be that drop-out effect, where
24 the other allele's not detected. But if there's an
25 allele that did not make the stochastic threshold --

1 stochastic threshold, it is possible that it's sister
2 allele or it's adjoining allele, that could have
3 dropped out.

4 Q Okay. So, if I understand this in
5 nonscientific terms. I'm a lawyer not a scientist.
6 But let me see if I can explain it to myself. What
7 you're saying is that, stochastic effects means that
8 when there's a low level of DNA, not a lot that
9 you're testing, sometimes there can be kind of some
10 spurious events that would cause some alleles to show
11 and some not; is that correct?

12 A Yes.

13 Q Okay. And so what a lab will do is set a
14 threshold, above which you can be sure that your
15 readings are more accurate. And below -- below that
16 threshold the stochastic effect is happening?

17 A Correct. Some labs will do that.

18 Q Okay. How long has the forensic DNA
19 community known about stochastic effects?

20 A It's been known about -- I will say though
21 that it wasn't really thought about in the forensic
22 community to apply a threshold until about 2010,
23 2009, maybe.

24 Q Right. In fact, didn't the Specific Working
25 Group on DNA analysis methods put out some guidelines

1 to require labs, or encourage them to -- every lab to
2 establish a stochastic threshold?

3 A Yes. They made recommendations, I believe,
4 it was 2010.

5 Q Right, in January of 2010?

6 A Yes, they made recommendations on that -- on
7 stochastic effect.

8 Q And this testing that you've done was --
9 that was done in 2008; is that correct?

10 A Correct.

11 Q Okay. Since 2010 -- well, let me back up.
12 At that time in 2008, did the Harris County Medical
13 Examiner's crime lab implicate stochastic thresholds?

14 A Did we implicate?

15 Q Or not implicate. Did you -- did you use
16 stochastic thresholds to take into account the
17 stochastic effect?

18 A In 2008, we had the one threshold which was
19 just the detection threshold. We did not have a
20 second threshold.

21 Q Okay. And today, after the recommendations
22 of the Scientific Working Group, has your crime lab
23 established a stochastic threshold?

24 A Yes. When we saw those guidelines we
25 changed our protocol to include a stochastic

1 threshold.

2 Q And so can you tell by looking at your
3 report of your results, whether any of your
4 conclusions would change considering the stochastic
5 effects and stochastic thresholds?

6 A I cannot determine that just by looking at
7 the report, no.

8 Q Okay. Can you determine which -- by looking
9 at the report, can you determine which samples had
10 low levels of DNA that -- that were tested?

11 A Again, I can't determine just by looking at
12 the report. That is some -- that would be something
13 that I would have to go back and reanalyze
14 evidence -- reanalyze the data. Every lab -- even
15 when you have a threshold, every lab actually has
16 different thresholds and it's based on their research
17 of their data.

18 So, I can't do that just by looking at
19 it. But the low levels are usually the -- what we
20 call the touch DNA, usually. Sometimes those
21 mixtures are low level. But when you have evidence
22 such as blood evidence, there's a lot of DNA in blood
23 and those are usually -- you have a lot of DNA in
24 those.

25 Q Is it possible that blood that was on an

1 item was a small amount. Is it possible that that
2 might have a low level of DNA to test?

3 A Some stains. As I said here some -- there
4 was, I think, one or two that were inconclusive
5 already because of low level, so...

6 Q Sure. So, as you sit here today, is it --
7 is it possible that if these items were retested,
8 taking into account stochastic effects, that your
9 conclusions could change?

10 A It's possible that when you go back and
11 reanalyze with a second threshold. Again, I don't
12 know, because I can't do that by looking at the
13 report. It might change -- usually what it changes
14 is the statistics, because it changes what is
15 eligible for making those calculations.

16 But I don't know what would have
17 changed what is. Usually, the only thing to consider
18 is that -- is this work was done according to our
19 guidelines at that time. And that's all I can say,
20 that this report is from what we were doing at that
21 time.

22 Q Okay. I have a question about -- you first
23 tested a few items on June 26th, 2008, and then you
24 tested some remaining items on September 24th, 2008;
25 is that correct?

1 A Yes. The -- the first report was sent in
2 June of 2008. And then we sent out a second report
3 in September of 2008.

4 Q Okay. So, in that first report, in June of
5 2008, you tested -- you tested the gray sweatpants at
6 that time?

7 A Yes.

8 Q Is that correct?

9 A Yes.

10 Q Okay. And you took -- I think you testified
11 you tested three stains from the sweatpants, A, B,
12 and C?

13 A Yes, for DNA.

14 Q Yes, for DNA. Okay. Do you have the June
15 report with you?

16 A Yes.

17 Q Today. Okay.

18 And in June, on one of those stains
19 from the sweatpants, you concluded at least one minor
20 contributor to the DNA mixture is male, but no
21 further conclusions can be made at that time
22 regarding any possible minor contributors; is that
23 correct?

24 A Yes.

25 Q And you also -- you identified Joyce Owens

1 as a possible major contributor and excluded Alberta
2 Walker?

3 A Correct.

4 Q An identified possibly male, but no further
5 conclusions; is that correct?

6 A Yes.

7 Q Okay. And then later in September 2008,
8 were the sweatpants tested again, or did you use just
9 the profile that you had generated from your
10 June 2008 testing?

11 A The sweatpants were not tested a second
12 time. We -- we used those results to make the
13 further comparisons we needed to make.

14 Q Okay. And again, on the -- on that later
15 report in September, from the same stain from the
16 sweatpants, I believe it was stain number one.

17 Well, let me go back to confirm what we
18 were talking about before. On your June 2008 -- you
19 were referring to stain number one from the
20 sweatpants; is that correct?

21 A We were referring to stain B from item 1,
22 which was the sweatpants.

23 Q Okay. Stain B, that's right, I'm sorry,
24 stain B. Okay.

25 So, still referring to stain B, in

1 September of 2008, your conclusion is that Joyce
2 Owens is still included as a possible major
3 contributor, Alberta Walker is still excluded as a
4 possible contributor, but Theron Owens now cannot be
5 excluded as a possible minor contributor.

6 Can you tell me why the analysis is
7 different three months later?

8 A It's not different, but I can explain why
9 that came later. In the first report, we received
10 items of evidence but we only had two references from
11 Ms. Owens and Ms. Walker. We did not receive a
12 buccal swab from Mr. Owens at that time.

13 So, when we had that mixture with a
14 male contributor, all we saw was a male. Because
15 remember it's a comparative test, and if I don't have
16 any male reference samples I can't make a comparison
17 to a male.

18 Q Okay. Thanks.

19 A I wasn't quite finished.

20 Q Well, you answered my question at this
21 point.

22 A Oh.

23 Q What I hear you saying is you didn't -- in
24 June, you didn't have a sample -- a reference sample
25 from Mr. Owens?

1 A Right, it came -- it came in later with --
2 and then we reported it with the September report.

3 Q And then back in June, you did testing for
4 blood on the blue jeans that were sent to your
5 office, correct?

6 A Correct.

7 Q And that testing resulted -- they were found
8 negative for blood?

9 A Correct.

10 Q I want to talk about a couple of the items
11 that had a mixture of DNA.

12 You testified earlier that in the
13 samples that you -- that you take, if it's a mixture
14 that means it's more than one person contributing to
15 the DNA sample; is that correct?

16 A Correct.

17 Q Okay. And on items 17 -- item 17, that was
18 the swab from the kitchen floor; is that right?

19 A Yes.

20 Q And you stated that your -- your testing
21 revealed a mixture of DNA. So, that's DNA from more
22 than one person?

23 A Correct.

24 Q Your testing revealed that Alberta Walker
25 was a major contributor to that mixture?

1 A Correct.

2 Q And your testing excluded Joyce Owens and
3 then excluded Theron Owens; is that correct?

4 A Yes.

5 Q So, is it fair to say then that mixture of
6 DNA included the DNA of Alberta Walker and the DNA of
7 someone else?

8 A No. The mixture, as we said, was consistent
9 with Alberta Walker being possibly the major
10 contributor. And then there was only one minor
11 allele that was not consistent with Alberta. And in
12 that paragraph I state that there's no further
13 conclusions that can be made regarding the minor
14 component. And because, as I stated earlier, with
15 one minor allele you can't make any distinction.

16 That's why I excluded both of -- that's
17 why I excluded both Owens' because I cannot make a
18 distinction with one allele. It was actually not
19 foreign though to either of them, but it's not enough
20 information to make that comparison.

21 Q Okay. So, what you can state for certainty
22 is that that sample is a mixture of Alberta Walker's
23 and someone else. You can say that with certainty?

24 A Someone other than Alberta.

25 Q Someone other than Alberta?

1 A Oh, correct.

2 Q Okay. And you cannot say with certainty
3 that -- you can't say with certainty who that someone
4 else is?

5 A Correct.

6 Q Okay. And the same is true on item number
7 26, which is the blade of the broken knife. Again,
8 there was a mixture of DNA. So, that means that more
9 than one person that's contributed to the sample,
10 right?

11 A Correct.

12 Q And Alberta Walker was a major contributor,
13 correct?

14 A Yes.

15 Q And both Theron Owens and Joyce Owens were
16 excluded?

17 A Yes.

18 Q Okay. And also the same is true from one of
19 the cigarette butts, item number 27?

20 A Yes.

21 Q Now, you tested two parts of the cigarette
22 butts. One was -- there was some blood detected on
23 the surface of the cigarette butt?

24 A Yeah, those -- there were stains on the
25 cigarette butt that were presumptively blood.

1 Q Okay. And then you also tested -- did you
2 test the -- like from the outside of the mouth part
3 or like the filter on the inside?

4 A The outside of the mouth part where you
5 would hold it to your mouth to smoke.

6 Q Okay. And the mouth -- the mouth part is
7 where you found a mixture of DNA?

8 A Correct.

9 Q Okay. So, you could say that the stain of
10 the blood, that was possibly -- possibly Alberta
11 Walker?

12 A Correct.

13 Q And that was a single source?

14 A Yes.

15 Q Okay. So not a mixture, just the one
16 person. The major contributor to that is Alberta
17 Walker?

18 A You said the major contributor --

19 Q Oh, well, it's a single source and so you're
20 saying it's most likely Alberta Walker?

21 A Yes, she was consistent with that profile.

22 Q Okay. But the mouth part had a mixture of
23 DNA?

24 A Correct. There was one extra allele.

25 Q Okay. And so that makes your conclusion

1 that it's Alberta Walker and someone else. And you
2 can't be -- you can't say for sure who that someone
3 else is?

4 A Correct.

5 Q Okay. When you talked a minute ago about --
6 on a few occasions finding some inconsistent alleles
7 and foreign alleles. And I believe you found one
8 foreign allele on the cigarette butt and one
9 foreign -- foreign allele on the handle of the knife?

10 A Correct.

11 THE COURT: Excuse me. Counsel both
12 sides and Ms. Pierce, we're going to take a lunch
13 break at this time. So 1:15.

14 Remember the instructions I gave you.
15 Members of the jury, do not discuss the case at all.
16 Do not Google or research any person, place, or
17 thing, or issue, or location mentioned in this trial.
18 Do not read any media reports -- media -- do not
19 listen to any media reports on TV or radio, or read
20 any such accounts on any newspapers, if any. And do
21 not discuss the case. Just have a good lunch. We'll
22 see you at 1:15.

23 THE BAILIFF: All rise.

24 (Jury exits courtroom.)

25 (Lunch recess.)

1 THE COURT: Both sides ready to go?

2 MS. LYTLE: We are ready. May we
3 approach?

4 (Bench Conference.)

5 MS. DAVIDSON: Judge, yesterday we
6 redacted State's 2. It will be introduced as 2A
7 because of the timing. Neither side has had the
8 opportunity to review what is on 2A. I had your
9 intern yesterday while we were putting on testimony
10 review it and follow it with the transcript. We are
11 assuming, based on what he told me, it's accurate to
12 what both sides wanted, so...

13 MS. LYTLE: Yes.

14 MS. DAVIDSON: If I get it on this
15 afternoon, we'll let it come in. Neither -- none of
16 the lawyers have never looked at it.

17 THE COURT: The final version?

18 MS. DAVIDSON: But Victor did tell me
19 it followed what we requested.

20 THE COURT: And you both agree to that?

21 MS. LYTLE: Yes.

22 THE COURT: Okay.

23 MS. DAVIDSON: The other matter.

24 THE COURT: If something comes up
25 follow very closely. Feel free to -- you might even

1 have to turn it off and on.

2 MS. DAVIDSON: The other just kind of
3 housekeeping matter. My son is being recruited by
4 colleges to play baseball. We have it set up to fly
5 to some of those schools so he can visit them if I'm
6 on the plane. If not he'll go with Charlie. I would
7 like to go. So I'm asking if maybe starting Monday
8 we can work later than 5:00 if we have to. I know
9 they have an issue with an expert.

10 MS. LYTLE: Your Honor, just to be
11 clear, Dr. Ofshe, he's one of our experts. He
12 indicated he can only be here Monday. And with some
13 conversations with the prosecutor, we anticipated us
14 being able to start our case on Monday. And now kind
15 of with the videos we have to play, it's pretty clear
16 Luci's case is going into Monday. If we have to, we
17 were -- Luci and I agreed if we could inform the jury
18 on Monday we may have to work past 5:00, just to try
19 to get our expert on and off on the day that he can
20 be here.

21 THE COURT: How much past 5:00?

22 MS. DAVIDSON: We won't know until we
23 get their expert on. If I finish this afternoon with
24 Detective Wedgeworth, which is what I'm hoping, when
25 all I have is Quanell X and Sergeant Clopton. So I'm

1 assuming, based on the length of the second CD, he
2 would -- they take all morning at the very least.
3 Possibly a little bit after lunch, to give them time
4 to put their expert on after that on Monday, we'd be
5 planning to break right at 5:00.

6 THE COURT: Sure we can do that.

7 MS. LYTLE: I don't want to keep them
8 here until 10:00, maybe until 6:00.

9 THE COURT: We'll play it by ear. Do
10 what works. But you know your witness can only be
11 here on Monday. He can only be here Monday. They
12 suffer because he can only be here Monday. Why can
13 he only be here Monday p.m.?

14 MS. LYTLE: He has a travel schedule
15 that is extraordinarily difficult to accommodate.
16 It's my understanding he took a special exception to
17 fly here. He's only able to be here one day. I do
18 plan to speak with him this afternoon, as we get
19 closer to the afternoon break.

20 We'll have a better idea of where
21 Ms. Davidson is going to be. And I'll just see if
22 it's possible for him to stay until Tuesday. Right
23 now he's telling me it's not. It might be an issue
24 of a little stronger persuasion.

25 THE COURT: Are you sure? It's a

1 question.

2 MS. DAVIDSON: Or the other
3 alternative -- although the elevators starting at
4 9:00 on Monday, that is the only problem.

5 THE COURT: We can do that, too. We
6 can do that, too. Mondays are usually light. We
7 start earlier, we do -- we do some of everything.
8 We'll start earlier and end later. I will tell them
9 it's going be a long day. But anyway, not that long
10 9:00 to 6:00 not 8:00 to 5:00.

11 MS. DAVIDSON: Okay.

12 (Bench Conference Concluded.)

13 THE COURT: Both sides ready for the
14 jury?

15 MS. DAVIDSON: Yes, Judge.

16 MR. MORROW: Yes, Your Honor.

17 THE COURT: Bring them in, please.

18 (Jury panel enters courtroom.)

19 THE BAILIFF: All rise.

20 THE COURT: Counsel, approach the bench
21 briefly.

22 (Bench Conference.)

23 THE COURT: Be seated, please.

24 I forgot about today.

25 MS. DAVIDSON: Yes, sir.

1 (Bench Conference Concluded.)

2 Q (BY MS. DAVIDSON) Okay. Good afternoon,
3 members of the jury. Did you have a good lunch?

4 JURY PANEL: Yes.

5 THE COURT: All right. I have a little
6 housekeeping announcement. Monday we are going to
7 start at 9:00 o'clock. We will take our breaks, but
8 we will start at 9:00 o'clock and probably work later
9 than usual. We will work probably until 6-ish, okay?

10 If we're at a natural stopping point,
11 we'll stop. Probably at 6:00. We may be later, so
12 if you have someone picking you up, try to make
13 arrangements between now and then. If you park in
14 certain places then that is going to be a problem.
15 Park somewhere else, okay?

16 All right. Both sides ready?

17 MS. DAVIDSON: State's ready, Judge.

18 MS. LYTTLE: Defense is ready, Judge.

19 THE COURT: All right. Ms. Lytle, I
20 believe you had Ms. Pierce on cross.

21 MS. LYTTLE: May I proceed?

22 THE COURT: You may.

23 **CROSS-EXAMINATION (Continued.)**

24 BY MS. LYTTLE:

25 Q Okay. Ms. Pierce, before lunch we were

1 talking about some of the foreign alleles that you
2 indicated in your testimony you discovered. For
3 those of us in the room like myself who are, I'd said
4 for those of us like myself who are scientifically
5 challenged, I would like to see if I can understand a
6 little bit more about what alleles actually are.

7 So, if I understood your testimony
8 correctly, when you're analyzing DNA, you are not
9 looking at the whole string of DNA. You are looking
10 at just certain portions of it that makes each person
11 unique?

12 A Correct.

13 Q And in that certain portion, you indicated
14 there are 13 -- would you call them locations?

15 A Yes, you can call them locations. It's
16 locus, or plural loci. But we look at 13 loci, which
17 are locations in the DNA.

18 Q And in each of those loci, there are two
19 alleles, correct?

20 A For each person, correct.

21 Q Okay. And one of those alleles comes from
22 my mom and the other one comes from my dad?

23 A Correct.

24 Q Okay. And for laymen's terms, these alleles
25 could be called kind of like identifiers. It's what

1 identifies you as you?

2 A Yes.

3 Q Okay. And some people, though not related
4 might have the same -- could two people who are not
5 related have the same alleles?

6 A Two people who are or are not related, could
7 have the same allele at one particular locus, just it
8 would not be the same in all the areas we test. But
9 you can share with strangers an allele here or there.
10 And as we discussed, once you are
11 closely related to somebody then that chance of
12 having the same allele is increased because you're
13 sharing more alleles.

14 Q For example, you and I both have brown hair.
15 Is it possible we share an allele that would
16 determine hair color?

17 A For hair color, yes.

18 Q But we would not share other alleles, but
19 maybe we'd share that one?

20 A Correct.

21 Q Okay. So when you determined a DNA profile,
22 you took the known blood of Alberta Walker, the known
23 blood of Joyce Owens, and tested that to determine
24 whether their 13 loci look alike?

25 A Yes. I tested to see what alleles they had

1 at each locus.

2 Q And you did the same thing with a known
3 saliva sample with Mr. Owens?

4 A Correct.

5 Q So, that's kind of your -- that is your
6 basis what -- that is what you're comparing all the
7 evidence tested against, correct?

8 A Yes, yes.

9 Q Okay. So when you run a testing on a
10 sample, you see how many of those alleles are
11 consistent with all three of your test subjects,
12 Ms. Owens, Ms. Walker, and Mr. Owens?

13 A Correct.

14 Q And I believe you testified that in three
15 instances you found a foreign allele. One was on the
16 purse in bedroom three, one was on a cigarette butt,
17 and one was on the handle of the knife; is that your
18 testimony?

19 A I believe so.

20 Q Okay. So if I understand you correctly,
21 finding a foreign allele means there is one allele
22 that does not match any of the three of your test
23 subjects?

24 A Correct. And actually with one of the
25 items, it was more than one foreign allele. But the

1 two -- the cigarette butt and the knife handle, those
2 were one foreign allele each.

3 Q And the purse swabs, that was more than one
4 foreign allele. How many foreign alleles on the
5 purse?

6 A Let me check.

7 Q Sure.

8 A Looks like four or five locations had
9 foreign alleles.

10 Q And that was on the purse in bedroom number
11 one?

12 A Correct?

13 Q Okay. So the discovery of these foreign
14 alleles, I believe you testified it's not enough to
15 run a full, complete DNA profile such that you could
16 determine whose alleles those are; is that correct?

17 A Well, on items where there was one foreign
18 allele, each with one allele, you cannot make a
19 determination. Because as you said, somebody related
20 to you or even not related may have the same allele,
21 and there's not two people in the world that should
22 have that.

23 Q So, you can't -- sorry, go ahead.

24 A But with the persons of those foreign
25 alleles. If I did say a reference sample of somebody

1 else, then I couldn't make a comparison as there is
2 no other reference samples.

3 Q So, if you had been provided with reference
4 samples from someone else, that would have been
5 enough to compare?

6 A Possibly.

7 Q Possibly, with one foreign allele?
8 Obviously you cannot just guess, but one allele whose
9 it may be, even if you did have all the reference
10 samples in the world?

11 A Correct.

12 Q Is that what you're saying, but it is enough
13 to determine that that -- that that biological
14 matter, that allele did not come from any of your
15 three test subjects?

16 A Correct. There is one exception though with
17 one of the items. If I may explain?

18 Q Sure.

19 A It's really scientific, so I didn't know to
20 what extent it should be discussed. But one of the
21 items that had one foreign allele, I believe it was
22 on the cigarette butt. Yes, the foreign allele on
23 the cigarette butt, is -- okay, I will explain this
24 at that location.

25 The two alleles that are consistent

1 with Ms. Walker, yes, her alleles at that location,
2 those alleles are called -- one is called 28 and one
3 is a 30. They're designated with numbers. The
4 foreign allele is the 29. Which is in between the
5 two. And that's in what we call the stotter position
6 of the DNA profile.

7 And what stotter is that statements
8 when there is a lot of DNA -- when we're developing
9 that profile, the amount of copies we make, because
10 we make lots of copies of those locations we are
11 looking at, to increase the amount of DNA we have.
12 When we make copies of that location, of that allele
13 at that location, sometimes it's off by one and it's
14 a very low percentage and usually is not enough to
15 get detected.

16 And so sometimes we have what's called
17 elevated stotter, and it could be either one higher
18 here than the actual allele. And that might not mean
19 what I'm trying to say. Although it's very
20 scientific. It might not be the stotter effect of
21 Ms. Walker's profile. But again, I cannot tell if
22 it's stotter or a foreign allele.

23 That is why too, when you have one
24 allele it gets a little into a gray area. So that
25 one, because of the position it's in, I'm not sure if

1 it's from somebody else or if it is Ms. Walker's DNA
2 that got amplified one over.

3 With the other profile with the wooden
4 knife, that is not in a stotter position, so that
5 does indicate somebody else does not have the allele.
6 If that makes any sense.

7 Q Sure. Thank you for explaining that. Just
8 a couple other -- just -- I'm not going to say one
9 more question when I might have two. I don't want to
10 have lied to you.

11 So, if the samples you took from -- the
12 blood sample, if you will, that you took from the
13 clothing, for example, the sweatpants, tank top, the
14 T-shirt, and the blanket, these clothing items. When
15 you are running the tests, there is not any way to
16 tell how long that stain had been there, is there?

17 A On the clothing, no, there is not.

18 Q Okay.

19 MS. LYTLE: I pass the witness, Your
20 Honor.

21 THE COURT: All right.

22 MS. DAVIDSON: I don't have anymore
23 questions of Ms. Pierce.

24 THE COURT: May Ms. Pierce be excused?

25 MS. DAVIDSON: Yes.

1 MS. LYTLE: Yes.

2 THE COURT: Subject to all purposes?

3 MS. LYTLE: I think for all purposes.

4 MS. DAVIDSON: All purposes.

5 THE COURT: Thank you, ma'am. You're
6 free to go.

7 THE WITNESS: Thank you.

8 THE COURT: What says the State?

9 MS. DAVIDSON: State calls Charlie
10 Walker.

11 THE COURT: Good afternoon, Mr. Walker.
12 I believe you were sworn the other day.

13 THE WITNESS: Yes, sir.

14 THE COURT: Feel free to adjust the
15 chair and microphone, and listen as carefully as you
16 can. Answer as directly as you can. They will ask
17 all the questions necessary.

18 You may proceed.

19 MS. DAVIDSON: Thank you.

20 **CHARLIE JOSEPH WALKER, III,**
21 having been first duly sworn, testified as follows:

22 **DIRECT EXAMINATION**

23 BY MS. DAVIDSON:

24 Q Can you introduce yourself to the ladies and
25 gentlemen of the jury?