

1 **PRISCILLA HILL,**

2 having been first duly sworn, testified as follows:

3 **DIRECT EXAMINATION**

4 BY MS. COOPER:

5 Q Can you introduce yourself to the members of
6 the jury, please?

7 A Hi, my name is Priscilla Hill.

8 Q How are you employed?

9 A With the Houston Police Department crime
10 laboratory.

11 Q And if you can tell the members of the jury
12 about your background, your education and training?

13 A Sure. I have a bachelor's of science degree
14 in forensic science from Baylor University and a
15 master's of science in forensic DNA analysis from the
16 University of Central Lancashire (phonetic).

17 Q How long have you been employed at the
18 Houston crime lab?

19 A Almost eight years now.

20 Q And what is your job title?

21 A I'm a criminalist.

22 Q And what is a criminalist?

23 A Well, specifically at HPD, I'm a forensic
24 DNA analyst. We're all -- have the criminalist
25 title, but there's different disciplines. My

1 discipline is forensic DNA and I work in the biology
2 section there.

3 Q And what is -- what do you mean by forensic
4 DNA?

5 A We receive cases that items of evidence are
6 requested, and we obtain those items, inventory them
7 and screen them for potential biological fluids.

8 Specifically at HPD, we test for blood
9 and semen, and we also retain for contact DNA. Any
10 items that are a positive or yield a positive result,
11 are carried on to DNA analysis. And in that portion,
12 we are -- we have several tests that we do -- that we
13 perform. Develop profiles and compare those profiles
14 to references in the case, interpret those results
15 and draw conclusions.

16 Q What is contact DNA?

17 A Contact DNA refers to touch DNA. For
18 example, if I touch this counter, I've transferred
19 cellular material on to the surface. I can't see it,
20 but potentially if I swab that area that I touched, I
21 could potentially get a DNA profile that's consistent
22 with my own.

23 Q So every time someone -- like if I were to
24 touch the table, am I automatically going to leave
25 testable DNA behind?

1 A Well, we shed our cells at different rates.
2 So, it's possible that you -- I left a couple of
3 cells, whereas somebody else may come behind me and
4 touch that same surface and leave many more cells,
5 because they slough off more DNA cells. And at the
6 same time, they may have picked up my own.

7 Q Why would it happen -- or is it common to --
8 if you know someone has touched something or handled
9 something, would you not see any DNA at all on that
10 item?

11 A Well, it just -- with contact it just
12 depends. We don't have a test to visualize contact
13 DNA. And because we're dealing with such a small
14 amount of material, sometimes either one, there's
15 just no DNA to collect, so we get a negative result.
16 Or there's just not enough for our test to detect.

17 Q I want to talk to you specifically about HPD
18 Case No. 064-404-611, did you -- were you the analyst
19 or the criminalist assigned to handle the DNA testing
20 in that case?

21 A The analysis of this case, yes.

22 Q Did you receive swabs -- four swabs from --
23 or in this case, to be tested and analyzed for DNA?

24 A The laboratory received swabs for analysis,
25 yes.

1 Q And were those swabs tested for DNA?

2 A They were.

3 Q Was there any kind of -- or what is a DNA
4 profile? If you can explain that before you answer
5 the question.

6 A For forensic purposes, obviously DNA is used
7 throughout different medical purposes. For
8 forensics, we have a kit that targets 15 different
9 places in the genome, along with the sex determining
10 gene, and we amplify this.

11 By that, I mean we make multiple copies
12 of these 15 places, and run that through a genetic
13 analyzer instrument that will allow us to visualize
14 that -- those target DNA, the full sixteen then
15 locations, composes the genetic profile for a person.

16 Q So do all 16 places have to be present on an
17 item or the test -- an item tested in order to say
18 that we've developed a profile?

19 A No. The full profile is the genetic profile
20 for 16 places. But obviously, some samples will
21 yield partials. Meaning, we don't obtain all the
22 results for all 16 places. Some do. So it just
23 depends on the sample.

24 Q Was there any DNA profile at all able to be
25 obtained on the swabs that were tested in this case?

1 A No, no DNA profile was obtained from the
2 items.

3 Q Now, if we know for sure that -- let me show
4 you State's Exhibit Number 73.

5 Let's assume that we know that this
6 door was touched by someone, either by their arm or
7 their shoulder or their chest or whatever, and that's
8 where the swabs were taken from, why -- what are some
9 of the reasons why we wouldn't have a profile that
10 was obtained from those swabs?

11 A Well, there could be a variety of reasons.
12 Again, contact we cannot visualize. So, we would
13 be -- whoever would swab in areas where you would
14 think potential contact occurred. Obviously, as I
15 said before, we slough in different rates. So -- and
16 also depends on the surface that you are in contact
17 with. Slicker surfaces don't grab on to the cellular
18 debris as well as a porous surface.

19 If you think about a porous surface,
20 there's a lot more grooves available to hold that
21 cellular material on, as opposed to a slick surface.
22 Also the collection process would be a determining
23 factor, as well. Where the item was swabbed, how
24 much of the area of the item was swabbed. So all of
25 these things are factors. There's just so many

1 factors that go in to potentially getting a result
2 from contact DNA.

3 Q And what do you mean that -- you said that
4 everyone sloughs cells off at different rates.

5 A Uh-huh.

6 Q What kind of -- what do you mean by that?
7 How does that impact whether or not you're able to
8 obtain a profile?

9 A Well, if I'm a person that doesn't shed very
10 many cells, when I come into contact with the
11 material, I may not be shedding enough to get a
12 readable or enough sample to get a result. Other
13 people, maybe they slough more at that time. Or they
14 sweat a lot easy -- easier, or have a lot more oils
15 in their -- on their hands or on their bodies. And
16 those types of things are good vessels to transport
17 cellular debris, which then in turn might be enough
18 to get a good result.

19 Q So any -- in the analysis that was done on
20 this case, was there any DNA at all that was obtained
21 in this case?

22 A We did not obtain a profile, no.

23 MS. COOPER: I pass the witness.

24 MR. MAYR: I want to ask that question,
25 again, though.

CROSS-EXAMINATION

1
2 BY MR. MAYR:

3 Q Was there any DNA -- I understand that there
4 are -- you have to have a certain amount to develop a
5 profile. Was there any deoxy -- I've forgot what the
6 name from my science class. Was there any DNA found
7 from those swabs taken from the door?

8 A No, we did not obtain any DNA.

9 Q Whatsoever?

10 A No, sir. Not from the evidentiary items.

11 Q Let's talk a little bit about the sources of
12 the DNA. You mentioned that if a person sloughs.
13 Now, when you talk about sloughing, are we talking
14 about epithelial or skin cells?

15 A Yes, sir, potentially, yes.

16 Q That's one source of it, but then it could
17 also come from actual sweat itself; is that true or
18 is that not true?

19 A Sweat is more of the vessel that is good to
20 transport these -- the skin cells that you're
21 referring to. They can go with the sweat and then
22 deposit on an item.

23 Q And another factor -- but another factor
24 that's going to effect whether there's contact DNA or
25 not is, obviously if I just touch it like that

1 (indicating) versus putting my hand down and pushing
2 it really hard on this table, that's going to
3 increase the probability that more touch DNA is going
4 to be left behind?

5 A Well, you've applied a greater area, surface
6 area that contains cellular debris to slough off onto
7 that surface, than a finger as opposed to a full
8 hand. So, yes, that potentially true.

9 Q Or if the shooter is wearing a white T-shirt
10 and they're pushing with their shoulder and they've
11 got their whole arm into it, that's a large area to
12 leave off that DNA, correct?

13 A Well -- and it would depend on obviously --
14 you mentioned a T-shirt. A T-shirt is a barrier, so
15 that could --

16 Q Let me cut you off there.

17 A Sorry.

18 Q I'm talking about a sleeveless shirt.

19 A Oh, I'm sorry.

20 Q Yeah, I'm sorry. I --

21 A I assumed sleeves. Yes, if you're -- okay.
22 Sleeveless T-shirt, can you refer to your scenario
23 one more time?

24 Q Oh, if there's -- there are, if there's
25 information that the shooter was wearing a white

1 sleeveless T-shirt.

2 A Okay.

3 Q Okay. A shirt.

4 A Okay.

5 Q And he's got his bare shoulder and he's
6 pushing against the door, that's going to expose a
7 large area in which touch DNA can be transferred to
8 that surface?

9 A Oh, potentially, yes.

10 Q All right. Is it fair to say that your
11 field is a constantly evolving one, in the sense that
12 tests are in place now that are able to do things
13 that you weren't able to do say ten years ago or
14 maybe even five years ago?

15 A Yes, thankfully.

16 Q And the rapid advancement of these tests
17 make it to where you just need -- whereas in the
18 past, you need to have large amount of touch DNA in
19 order to develop a profile. It's gotten to the point
20 where you don't need as much. That's why you talk
21 about only having -- looking at 15 locations; is that
22 right?

23 A Well, the locations are places in the genome
24 that we look for. That's more on the fact of the
25 places that we look for do not code for anything.

1 Doesn't really have anything to do with the quantity.
2 Now, in the quantity aspect, yes.

3 Before, there were tests where we
4 needed to have a lot more DNA than we do now to
5 obtain that full profile. But even so, we depend on
6 quantity and quality still. So if the quality of DNA
7 is not there, intact DNA, it could be degraded, then
8 we will not get a profile. Or if there's just not
9 enough, we still have a limit of detection. So if
10 there's just not enough there, we won't get a
11 profile. Or if it's just not there, we won't get a
12 profile.

13 Q That's right. In five or ten years though,
14 at the rate that the science is advanced in your
15 field, it's going to be become easier to find a DNA
16 profile, which -- you think that's very possible in
17 your field, given the developments?

18 A Well, I hope that our detection threshold
19 will even minimize even further than we already are.
20 We are highly sensitive at this point. But we can
21 still get more sensitive.

22 Q Okay. One last thing. You did also receive
23 a sample of my client, Gareic Hankston's DNA, that
24 was provided so that you could compare if there was,
25 in fact, DNA detected?

1 A Oh, a reference sample was submitted to the
2 laboratory, and we did perform DNA analysis on that
3 reference sample.

4 Q Nothing to connect him to anything
5 affiliated with this case in terms of DNA?

6 A No, sir.

7 MR. MAYR: No further questions, Your
8 Honor.

9 THE COURT: All right. Anything else?

10 **REDIRECT EXAMINATION**

11 BY MS. COOPER:

12 Q There's nothing to connect anyone to this
13 case as far as DNA?

14 A No. I could make no comparisons with no
15 profile.

16 MS. COOPER: I pass the witness.

17 THE COURT: All right.

18 MR. MAYR: I have no further questions,
19 Your Honor.

20 THE COURT: May Ms. Hill be excused?

21 MS. COOPER: Yes, Judge.

22 THE COURT: Thank you, ma'am.

23 THE WITNESS: Thank you.

24 THE COURT: What says the State?

25 MS. COOPER: State calls Tonie

1 Germany-Brown.

2 THE COURT: Tonie Brown. Okay.

3 THE BAILIFF: She has been sworn
4 earlier, Judge.

5 THE COURT: All right. Thank you.
6 Good afternoon, Ms. Brown.

7 THE WITNESS: Good. How are you doing?

8 THE COURT: Just fine. How are you?

9 THE WITNESS: Fine.

10 THE COURT: Good.

11 Feel free to adjust the chair and
12 microphone, make yourself comfortable and answer as
13 directly as you can. And if you can't hear the
14 question or don't understand, just say so. They'll
15 be clearer or speak louder.

16 THE WITNESS: Okay.

17 THE COURT: You may proceed.

18 **TONIE YOLANDA GERMANY-BROWN,**
19 having been first duly sworn, testified as follows:

20 **DIRECT EXAMINATION**

21 BY MS. COOPER:

22 Q Good afternoon.

23 A Good afternoon.

24 Q Could you introduce yourself to the members
25 of the jury, please.