

**Commission of Inquiry
to examine DNA Project 13 concerns**

Brisbane Magistrates Court
Court 40, 363 George Street, Brisbane

On Tuesday, 31 October 2023 at 9am

Before: The Hon Dr Annabelle Bennett AC SC, Commissioner

Counsel Assisting:

Mr Andrew Fox SC (Senior Counsel Assisting)
Ms Gabriella Rubagotti (Counsel Assisting)

1 THE COMMISSIONER: Before we start the proceedings this
2 morning, I want to say something.

3
4 I was made aware that yesterday evening there was
5 a breach of the media protocol, and that there was
6 a broadcast on Channel 10. We have made some inquiries and
7 an explanation has been received, but I want to say two
8 things about it. The first is: I now make an order in
9 terms of the protocol to make it clear that if there is any
10 further breach of the media protocol, it may well
11 constitute a contempt of this Commission.

12
13 The second thing is, if there is any further breach of
14 the protocol at all, I will seek an explanation personally
15 from the head - I will be giving notice to attend to the
16 head of any station or any media outlet that breaches the
17 media protocol. I just want to make that statement now and
18 make it clear.

19
20 I did ask for the particular journalist to be present
21 here this morning to give an explanation and that
22 journalist has explained that (a) he says it was a mistake
23 and (b) that he is not able to be present this morning
24 because he is covering something somewhere else in the
25 state, I think it might well be a bushfire, which is
26 another sad thing to have to cover, but there is to be no
27 breach of the media protocol. I make that perfectly clear.

28
29 With those words, I now call upon you, Mr Fox,
30 thank you.

31
32 MR FOX: Thank you, Commissioner. Could I start with
33 a matter of housekeeping and provide you with an updated
34 tender list for today's purposes. What I have done is just
35 to identify on the second page in the highlighted 24/25/26,
36 the further statements, and then also on the final page,
37 items 57, 58 and 59. The document doesn't contain
38 Dr Wright's second report at this stage. We will add that
39 overnight.

40
41 In terms of the proceedings today --

42
43 THE COMMISSIONER: I note those and they will be given the
44 same exhibit numbers as in the previous protocol.

45
46 **EXHIBITS TENDERED AS PER SCHEDULE**

47

1 MR FOX: Thank you. So we're starting with a concurrent
2 session between four experts this morning. We'll have two
3 appearing by videolink and then two present. We'll have
4 Dr Wright and Professor Linzi Wilson-Wilde present and we
5 have Dr Budowle and also Ms Veth appearing by videolink.
6 I understand that they are hopefully ready to be joined, at
7 least --

8
9 THE COMMISSIONER: I can see one person. I assume that's
10 Ms Veth on the screen.

11
12 MR FOX: I suppose it's a matter of inviting the two
13 present experts to the box to be sworn in the usual way and
14 I will outline the general territory to be covered.

15
16 THE COMMISSIONER: Dr Wright and Dr Wilson-Wilde, would
17 you come into the hot tub, as we've been calling it,
18 thank you.

19
20 <KRISTY WRIGHT, affirmed: [9.03am]

21
22 <LINZI WILSON-WILDE, affirmed: [9.03am]

23
24 <JOHANNA VETH, affirmed [9.03am]

25
26 <BRUCE BUDOWLE, affirmed: [9.03am]

27
28 THE COMMISSIONER: Thank you.

29
30 MR FOX: Commissioner, did you want to say anything by way
31 of introduction to the experts?

32
33 THE COMMISSIONER: I'm not sure, actually. I sort of
34 assume as experts they may well have been familiar with the
35 idea of what is otherwise concurrent expert evidence, and
36 I know that - I don't think Ms Veth - I don't know if
37 Ms Veth and Dr Budowle were watching yesterday at the time
38 when I gave the explanation about it. I know that both
39 Dr Wright and Dr Wilson-Wilde were present.

40
41 Just to make it absolutely clear, you will be asked
42 a series of questions, they may be directed to any one of
43 you, but if a question is directed to one, it doesn't mean
44 that the others cannot make an observation. In fact, you
45 would be encouraged to do so. I think certainly Mr Fox
46 will have initial control of it. But it has to be orderly.
47 So if you indicate that you wish to make a comment, you may

1 be asked, but if you're not specifically asked and you wish
2 to make a comment, please feel free to raise your hand and
3 you can ask a question of each other if you wish to do so
4 to clarify or elaborate any particular point. That is the
5 way that it's going to work.
6

7 MR FOX: Thank you, Commissioner. Can I just indicate to
8 the expert witnesses just the general topics that we're
9 going to address in the course of this morning. If it
10 spills into the afternoon, so be it. The first is that
11 we're going to look at the Project 13 scientists' evidence
12 and also the Project 13 report. We're then going to look
13 at the circumstances in which all experts gave their
14 evidence in the first Inquiry, and that was done right at
15 the very end of the Inquiry, and I will be leading some
16 questions about that. Then the third area of discussion
17 will be in relation to the questions that have been -
18 sorry, the steps that have been taken by Forensic Science
19 Queensland since Professor Wilson-Wilde was appointed as
20 the CEO, so that will be an opportunity for you to indicate
21 the steps that have been taken and for your colleagues to
22 indicate what they have to say about that.
23

24 That's the general territory. There are documents
25 that I will be referring to from time to time, if that
26 becomes necessary. They will be called up electronically
27 on the screen in front of you, and of course you will have
28 your own reports or other documents. Feel free to make
29 reference to those. It is not intended to be a memory test
30 so if you need to go back and look at something, please
31 feel free.
32

33 Can I just start by asking each of you as to what you
34 have read and considered. Dr Wright, I will lead you in
35 this respect, I'm going to work on the basis that you have
36 read all of the Project 13 scientists' statements and you
37 had the opportunity to listen to their evidence yesterday.
38

39 DR WRIGHT: Yes.
40

41 MR FOX: Professor, you have had an opportunity to read
42 the statements as well?
43

44 ADJUNCT PROFESSOR WILSON-WILDE: I have, yes.
45

46 MR FOX: Did you manage to watch the oral evidence
47 yesterday?

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ADJUNCT PROFESSOR WILSON-WILDE: I was present in the --

THE COMMISSIONER: I think she was present.

MR FOX: I didn't say that, so thank you. I was too focused on what was in front. Then can I just turn to Ms Veth, could you just indicate whether you have read all of those Project 13 scientists' statements and also managed to watch yesterday the oral evidence?

MS VETH: Yes, that's correct.

MR FOX: Thank you. And Dr Budowle, the position with respect to you, please?

DR BUDOWLE: Yes, I've read all the statements that were provided to me by the scientists, Professor Wilson-Wilde and Dr Kirsty Wright's statements, and - but I did not watch yesterday's proceedings.

DR BUDOWLE: Thank you.

THE COMMISSIONER: Which is understandable considering the time frame.

MR FOX: We might ask if the audio could be increased, which would be helpful I think, particularly for those experts who are a bit further away from the screen.

Could I just confirm also in relation to Dr Budowle, Ms Veth and Dr Wright, you have obviously read and considered the Project 13 report now that you have obviously been asked to give evidence in this particular forum, so I note that, Dr Wright, particularly for you. Professor, you have now had a chance to consider that document in more detail?

ADJUNCT PROFESSOR WILSON-WILDE: I have, yes.

MR FOX: Ms Veth, have you now considered that document? I know you weren't provided with that before the first inquiry?

MS VETH: Yes, I have.

MR FOX: Dr Budowle, you have also considered that

1 document?

2

3 DR BUDOWLE: Yes, since it was provided recently.

4

5 MR FOX: Thank you. Can we then turn to the first topic
6 of the modified DNA IQ protocol which was being used with
7 the MultiPROBE device. So you understand, just in terms of
8 the nomenclature for today's purposes, when I refer to the
9 automated DNA IQ protocol I'm referring to what the
10 laboratory implemented in October 2007. That involved
11 a modified manual DNA IQ protocol which was itself, when
12 I say "modified", modified from the off-the-shelf Promega
13 DNA IQ protocol. So we're all clear on understanding those
14 steps? Just say yes if that's the case.

15

16 MS VETH: Yes.

17

18 DR BUDOWLE: Yes.

19

20 MR FOX: Thank you. I want to ask about the modifications
21 that were made for the manual DNA IQ protocol. You will
22 have heard yesterday in the evidence and, Dr Budowle, you
23 would have seen this, particularly in the evidence of
24 Dr Hlinka, he sets all of these points out, but joined in
25 by his colleagues when they talk about the modifications,
26 just to mention them briefly, there was the first
27 modification which was the inclusion of a lysis step using
28 an extraction buffer in the presence of Proteinase K, that
29 was before the incubation in the DNA IQ lysis buffer; the
30 second modification was that the lysis incubation
31 conditions were lowered to 37 degrees Celsius, and it was
32 said that that was done to broaden the range of samples
33 that could be used or tested. The third modification was
34 that there was a double elution step, you will recall that
35 evidence. So this was that the QHFSS manual and the
36 automated DNA IQ methods both had a double elution of
37 50 microlitres whereas the CFS automated DNA IQ protocol
38 had a smaller elution volume towards the lower amount
39 recommended by Promega. That was around using 25 to
40 100 microlitres. Then the fourth modification was the -
41 I think I may have flippantly referred to that as the
42 plastics amendment, and that was the use of the Nunc -
43 N-U-N-C - Bank-It tubes for storage of final extracts and
44 then Mr Nurthen also talked about the modifications which
45 were made to the Slicprep desk.

46

47 Can I just ask you in relation to those four

1 modifications? Firstly, I will start with Dr Budowle. Do
2 you have any observations to make about the fact that
3 modifications were made from the off-the-shelf manual
4 DNA IQ protocol as developed by Promega?

5
6 DR BUDOWLE: Any method that one may entertain may be
7 modified depending upon the performance in the hands of the
8 laboratory, because there are certain times and certain
9 situations where the environment, the chemicals that are
10 used, the buffers that may be required, may impact the
11 performance from what a manufacturer has delivered.
12 However, typically, when you start, you begin with the
13 procedure that is recommended when you have a baseline of
14 its performance, compared to whatever performance other
15 methods are in your laboratory. Then, if that performance
16 is equal to or better, you might keep it; if it is worse
17 you might try to improve upon it; or if you think there are
18 some ideas you might entertain that could improve even
19 beyond what was recommended, those are always worth
20 considering, as long as it is done in a controlled fashion.

21
22 MR FOX: Do you consider that those modifications that you
23 saw - was there anything unusual about them or unexpected
24 or any degree of controversy on your part when you saw
25 them?

26
27 DR BUDOWLE: Not generally. However, because I didn't go
28 into depth on these, for this - for today's proceedings,
29 double elutions, though, do create some issues because they
30 create a larger volume of sample and a larger volume of
31 sample can dilute out the amount of DNA in a certain - in a
32 volume. So though typically - let's just - I will make up
33 a number, if you retrieve things in 50 microlitres and you
34 have a good yield relatively speaking to a second elution,
35 but then you do a second elution, you pool them together,
36 you may not have the same amount of DNA per unit volume
37 that you had with the first elution. So it would be very
38 important to assess those impacts, because diluting out may
39 reduce the amount of DNA that can be placed into
40 a subsequent reaction.

41
42 MR FOX: Professor Wilson-Wilde, would you like to comment
43 on this topic now?

44
45 ADJUNCT PROFESSOR WILSON-WILDE: Sure. I had the same
46 comment to the Commission in the sense of they were eluting
47 to 100 microlitres, whereas I felt that if they were

1 eluting to a smaller volume, they would get a higher
2 concentration of DNA, and maybe get a more beneficial
3 result.
4

5 I will say that in terms of the changes from the
6 original Promega method, there was the extraction wash step
7 with the Pro K and the TNE, and then they did a lysis step
8 with DTT after that, and then added the - and added the
9 lysis and the resin beads as well. So there were sort of
10 multiple steps in the process compared to the original
11 method, which in itself is not unusual, but each of those
12 changes really should have been checked independently.
13

14 MR FOX: And you couldn't see anything amongst the
15 materials that suggests that that had actually occurred?
16

17 ADJUNCT PROFESSOR WILSON-WILDE: Not from what I could
18 see.
19

20 MR FOX: Ms Veth, would you like to indicate your response
21 to the general question posed?
22

23 MS VETH: Yes. I don't have anything really to add. It's
24 quite normal for there to be modification testing, but it
25 should be done with good reason, the modifications should
26 be done with good reason and that documented, and then
27 those modifications performed in a sort of step-wise
28 fashion so that you can determine the efficacy of each
29 modification, and I'm not sure that the Project 13 document
30 really explains the results of each modification step by
31 step.
32

33 MR FOX: Thank you. Dr Wright?
34

35 DR WRIGHT: I agree with the other experts. The double
36 elution I think was the biggest change that may have had
37 the largest impact. I think the prime volume was 120 to
38 100 microlitres versus 50 microlitres. The Slicprep as
39 well, I've never worked with one of those. In Mr Nurthen's
40 testimony yesterday he did raise a couple of times concerns
41 whether the plasticware, the 96-well plate plasticware that
42 was on the robotic platform on the heating stage, whether
43 the plasticware was able to heat up to the required
44 temperature. So they did the right thing, they tested the
45 heating plates on the robot and they were all working
46 accordingly, but when you start changing plasticware, and
47 it may only seem like a small change, but it may be that

1 the sample inside the well may not be heating up.

2

3 The third thing was I'm not sure about the reduction
4 in the temperature and the selection of the Proteinase K
5 that was used. They are all things that need to be
6 considered. Proteinase K has a broad operating
7 temperature. It also has optimal working temperature as
8 well. But as long as the other experts have said that they
9 treated each of those as individual variables and they made
10 sure that each of those, you know, very minor changes were
11 tested one at a time, I don't believe there is an issue
12 with modifying an existing method.

13

14 THE COMMISSIONER: Can I just ask one question in
15 respect - I understand everyone's commented on the elution
16 and that could be a problem because it's logical that if
17 you put more volume in, you decrease your concentration.
18 I asked yesterday, I think, about the initial increase in
19 the lysis step, and the explanation was that that wouldn't
20 have been the problem because that disappears when you put
21 it on to the beads, that - so I think it was in effect that
22 it was - once it goes on the beads, that increased volume
23 doesn't have an impact on the subsequent extraction of DNA.
24 Do you all agree with that?

25

26 DR WRIGHT: Yes.

27

28 ADJUNCT PROFESSOR WILSON-WILDE: Correct.

29

30 MR FOX: We have two yeses in the courtroom from the
31 Professor and also Dr Wright. Do you agree with that?

32

33 DR BUDOWLE: I'm trying to understand a little bit more
34 about the question, because are you saying the initial --

35

36 THE COMMISSIONER: I don't think Dr Budowle can really -
37 without going all the way back through it, I think it's too
38 difficult to ask him to - because he wasn't there to hear
39 the evidence.

40

41 MR FOX: Sorry, of course. And Ms Veth, you heard the
42 evidence yesterday?

43

44 MS VETH: Yes. And I agree, that wouldn't affect the
45 final volume or concentration.

46

47 THE COMMISSIONER: Thank you. That's one variable that we

1 can not worry about. Yes?

2

3 ADJUNCT PROFESSOR WILSON-WILDE: Perhaps I could add, the
4 volume is important to ensure that you've got sufficient
5 saturation of the swab, though, and the additional
6 chemicals that you add in to that extraction buffer will
7 have an impact on the efficacy of the extraction process,
8 the ability of those chemicals to lyse, to remove the
9 biological material off the substrate. So there is
10 a volume component to it, but there is also what you are
11 actually adding in as well.

12

13 THE COMMISSIONER: So is it possible, if you make that too
14 dilute, that the agents that are causing the extraction may
15 not work? Is that what you are saying? That would be the
16 only relevant - I understand that you have to have enough
17 volume to extract, but does that add a problem that it may
18 be that you are diluting the extracting agents, or would
19 they just have the same efficacy in a slightly larger
20 volume?

21

22 ADJUNCT PROFESSOR WILSON-WILDE: They would have to have
23 a different concentration within a larger volume, so they
24 will have a lower concentration, and so that could have an
25 impact.

26

27 THE COMMISSIONER: It's possible.

28

29 ADJUNCT PROFESSOR WILSON-WILDE: It is possible. You
30 would have to test it and change one variable at a time in
31 order to be sure.

32

33 THE COMMISSIONER: I see. You have all agreed, I think
34 there is full agreement, that any modification you make
35 should have been tested one variable at a time the.
36 I think all the experts have made that statement.

37

38 MR FOX: Certainly. Dr Wright?

39

40 DR WRIGHT: Just one further comment about the
41 temperature, lowering it to 37 degrees. Another risk of
42 lowering it might be the DNase. The DNase is I'll call it
43 a bad enzyme that is inside a cell. When the cell is
44 broken open, the DNase becomes active and it will actually
45 start eating the DNA. One of the functions of
46 Proteinase K, which is in your chemical solution, is to
47 deactivate the bad enzymes. So that would just be a risk

1 there, and DNase prefers that lower temperature, that room
2 temperature. So the DNase may have been more active, but
3 if the Proteinase K was suitable at that temperature, the
4 Proteinase K should have deactivated the bad enzyme,
5 because what we don't want is the enzyme chewing up our
6 DNA.

7
8 MR FOX: Before we move on from the topic of the
9 modifications that were made, in terms of the validation of
10 the modifications, Dr Wright, do you have any observations
11 to make about what the laboratory did in that respect?
12

13 DR WRIGHT: In relation to Project 13 and - I have to say,
14 I thought that there was a lot of open communication,
15 particularly at the end, with the lessons learnt from each
16 of the scientists. I think it was Mr Nurthen suggested
17 that they should have put together a validation plan that
18 should have been signed off by a quality manager, and they
19 should have put together an experimental plan as well,
20 a very deliberate experimental plan. So there were very
21 clear guidelines at the time, in 2007, when Project 13 was
22 commenced, about validation and the different parameters
23 within the validation that should be conducted. So it
24 should have been a full validation and they should have
25 adhered to, I guess, basic scientific principles in terms
26 of designing experiments and the various validation
27 guidelines that were in place at the time with NATA and
28 SWGDAM. It appears that they deviated from that. There
29 were, I think, lots of issues - it didn't conform with
30 a normal experiment or a normal validation.
31

32 MR FOX: Thank you. Professor?
33

34 ADJUNCT PROFESSOR WILSON-WILDE: Could you repeat the
35 question, please?
36

37 MR FOX: Just looking at the topic of validation of the
38 modifications that were made, just if you have any remarks
39 about what the laboratory did in terms of validation.
40

41 ADJUNCT PROFESSOR WILSON-WILDE: Thank you. I think when
42 you do a validation study, and I think this should have
43 been a validation study, I think there are two components
44 to this project, one is the instrument and the other is
45 a method. And each of those required their own components
46 to the validation study.
47

1 So in my experience, robots, you know, there is a lot
2 that they can - you can adjust and change, and I think
3 there is an optimisation aspect to the robot, making sure
4 that it is pipetting as it should be, moving as it should
5 be, et cetera.

6
7 And, then, in respect to the method, if they had made
8 any changes, then that should have been all laid out in a
9 step-wise process with a strong front-loaded empirical
10 matrix where it, if it is tabulated - and that's what
11 I prefer - you can actually physically see, very visibly,
12 that one variable is being tested at a time and you do the
13 front loading of the thinking, you document all of that,
14 that is what gets approved, and then you don't start until
15 that is approved.

16
17 Then that makes the testing process a lot easier
18 because you know exactly what you are testing. It also
19 means that you are not going off on tangents or you are not
20 perhaps trying to get an end goal and doing experiments
21 that fit an end goal, that you are very importantly
22 obtaining data that informs, then, what you do next or the
23 next step. I think that's really a vital part of empirical
24 study design, and that's a lot of what I didn't see in
25 Project 13, that really step-wise aspect to it.

26
27 The other thing that I think is really fundamental to
28 scientific research is someone should be able to pick up
29 that report and they should be able to replicate that
30 study, there should be sufficient information within the
31 report that an independent scientist can conduct exactly
32 the same experiment, and that wasn't there. It was really
33 difficult to ascertain how the experiments had been
34 conducted, whether there were confounding variables or not,
35 and so it was actually really hard to work out what you
36 could say from that study, based on the document.

37
38 MR FOX: Thank you. We'll come to - and I probably
39 started slipping into the Project 13 document but that has
40 created no difficulty at all. Ms Veth, can I start with
41 you first, do you have anything that you wish to add to
42 that discussion that has been had in terms of just the
43 notion of validation and validation of the modifications
44 that were made.

45
46 MS VETH: Only that this really wasn't - was barely
47 a validation. It certainly wasn't a complete validation.

1 I don't want to reiterate everything that the Professor has
2 said, but it's clear that this was incomplete.

3

4 MR FOX: Dr Budowle, do you have any observations you want
5 to make in addition to what has been said on the topic of
6 validation?

7

8 DR BUDOWLE: Well, I concur with what everybody has said
9 so far. There was just a couple of things, when you are
10 trying to move a manual procedure into an automated
11 procedure, and this is usually not taking a manual
12 procedure and expecting it to perform the same in
13 automation, because automation has certain constraints that
14 one can overcome when they are doing manual procedures. So
15 trying to fit - it is almost like - I won't call it
16 a square peg/round hole, but maybe an oval peg in a round
17 hole approach to trying to satisfy something, as opposed to
18 looking at the features and comparing performance of the
19 current method to the future methods.

20

21 Lastly, I would add, I'm not sure what we can rely on
22 in Project 13, because it isn't a formal report, it's not
23 finalised, and we've seen multiple versions in the
24 statements of Mr Nurthen that change things in content. So
25 I don't know what we can glean from that versus what may
26 have been in the minds of the individuals at the time.

27

28 MR FOX: Thank you. So we have effortlessly found our way
29 into the Project 13 report. Sorry, Dr Wright?

30

31 DR WRIGHT: Sorry, just one final comment about the
32 validation. In Mr Muharam's testimony yesterday, he
33 suggested that they over validated their various projects,
34 and I absolutely reject that evidence. Project 13 was not
35 a validation; it was not a verification - it didn't even
36 come anywhere close. So that is one, I think, thing
37 I would like to just point out, our differences of opinion
38 between the over validation versus - it didn't even come
39 close to a verification.

40

41 MR FOX: Thank you. I think I might start with you on the
42 Project 13 report. Just by way of introduction, your
43 comments that you would wish to make, I'm going to go into
44 some various aspects of it but I think it is useful to
45 start with some observations regarding the report itself
46 and what strikes you about it.

47

1 DR WRIGHT: I will just be very simple and brief. It was
2 incomplete. The process that Mr Nurthen described
3 yesterday of copying and pasting sections from other
4 validation - or other projects, the abstract, is a really
5 poor process. Writing the abstract before you've completed
6 all of your experiments is very risky.

7
8 There was a lack of data. The methods weren't clear.
9 It was very difficult, as the other experts have said, to
10 understand what was done. And, I mean, despite all of
11 that, and I will have to be honest, it was still clear from
12 that draft report that the method was failing. So despite
13 poor experimental designs and not adhering to guidelines
14 and, you know, the report itself being really quite poor,
15 it was still clear to see the method was failing.

16
17 MR FOX: Dr Budowle, would you like to provide your
18 introductory observations about the Project 13 report.

19
20 DR BUDOWLE: As others have said, it is rather scant and
21 incomplete and one can't reproduce the experiments.
22 I don't think it has good logic and detail. The data are
23 not supportive of an improved system based on the yield of
24 samples that would approximate the kind of samples coming
25 in.

26
27 Based on the statements, there was a suggestion that
28 a template was used. I'm not opposed to necessarily using
29 a template and repopulating, because similar formats are
30 used for reporting in agencies. I didn't find that as
31 a compelling argument, because the statements themselves
32 weren't exactly the same as other reports, because they
33 used the word "MultiPROBE II" for their conclusions, so
34 there was some effort to put in what the belief was.

35
36 My observation based on other knowledge of, you know,
37 the culture at the time, the work that's being done, it
38 seems the things the lab was more interested in putting
39 something online that is automated and not necessarily
40 assessing whether or not it was something that improved the
41 quality of the system - more about turnaround time, sample
42 processing, not sample quality. And this is just another
43 example of what we observed in the previous Inquiry.

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45 The overall reports, I'm not sure what the overall
46 data are, but based on the documents that Mr Nurthen
47 provided of Ms - was it Ientile?

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MR FOX: That's right.

DR BUDOWLE: There was a note, and I interpreted it as something to do with the performance was put up, you know, implement and then further optimise. That, based on the communication, if correctly remembered or recalled, would be not a good recommendation, given the data at the time.

MR FOX: Thank you. And could I just indicate to the experts that I want to come back to, separately, that notion that there had been an observation made by Mr Nurthen that was recorded in those notes, so I will come back to that as a discrete topic in a moment.

Ms Veth, would you like to indicate your introductory observations, please?

MS VETH: I was struck by the fact that there was one draft of the report dated prior to implementation and then several drafts of the report that were subsequent to implementation, and I find that striking because I don't know how the decision to implement was made based on the data in that first report. And to be honest, that data doesn't really change much between the various drafts. So I find that striking and concerning.

I mean, ideally, you will complete a validation, determine that whatever it is, whether it is a method or a piece of equipment, is fit for purpose, and then you implement, and then you check your results - you check the efficacy of the new equipment or method after implementation. It was almost like this method was implemented before it was validated, essentially.

MR FOX: Thank you.

DR BUDOWLE: May I add something?

MR FOX: Yes, certainly.

DR BUDOWLE: I think based on the statements that I read - and I don't know what was said yesterday - no-one took responsibility for this report, in fact, it didn't seem like anybody wrote the report, it just sort of materialised. I find it hard to believe, and I think this may be part of the problem, too - there was a lack of

1 ownership to take control of this and move it forward.
2 I don't know if that was clarified yesterday, but that was
3 a concern.
4

5 The fact that there is no final report and yet it was
6 moved into implementation is another concern, because I had
7 some trouble with Mr McNevin's statements of he didn't have
8 anything to do with it, but some of the scientists said
9 that he was consulted, because when you are a person taking
10 a procedure and implementing it, it's incumbent upon you,
11 a responsibility, to review the validation studies, because
12 validation studies define the limitations of the process.
13 So I find that there is some disconnect on multiple levels,
14 not just the report, not the ownership, not the
15 finalisation, but also the next step of the process, that
16 are serious concerns about Project 13.
17

18 MR FOX: Just in light of the fact that you have each
19 heard each other's introductory comments - there may be
20 some other introductory comments that people would wish to
21 make. Dr Wright, you had your hand up, I think?
22

23 DR WRIGHT: Yes, sorry, just to add to that - what Ms Veth
24 said. Introducing a method that hasn't been finalised, and
25 it's clear from that report it hasn't been finalised, as
26 well as the testimony from Mr Nurthen yesterday, it brings
27 about the real and genuine risk that then applying that
28 method to crime scene samples brings about the real risk
29 that at least some of those samples will fail when they
30 ought have provided a DNA profile.
31

32 As a forensic scientist working in a forensic
33 laboratory, working on rapes and murders, and understanding
34 in some cases the DNA may be the only vital evidence, to
35 introduce an incomplete method that was demonstrated to not
36 be performing, and apply those on precious crime scene
37 samples, they must have known that some of those samples
38 would fail, and as a scientist, I find that completely
39 appalling and reckless.
40

41 MR FOX: Ms Veth, would you have any comments to make in
42 response to what Dr Wright has just said then?
43

44 MS VETH: I'm in complete agreement. This method could
45 have been implemented solely for, for example, reference
46 samples, which are known samples from individuals that are
47 taken, for comparison to crime scene samples. So if they

1 were under pressure to implement an automated method, they
2 could have just restricted this method to those sorts of
3 samples where there was no real concern about the amount of
4 DNA present because they are samples taken directly from
5 individuals, and normally there's plenty sample to go back
6 to. But to use this method on crime scene samples, I agree
7 with Dr Wright, it was reckless.

8
9 MR FOX: Dr Budowle, your comments in relation to those
10 remarks of both Dr Wright and Ms Veth?

11
12 DR BUDOWLE: Again, revisiting the two types of categories
13 of samples, generally speaking, are reference samples and
14 evidence samples.

15
16 With reference samples, efficiency is not always the
17 requirement because you have copious quantities of DNA most
18 of the time, and so therefore, the efficiency may not be
19 necessary to meet. And it can perform less but
20 faster/better - faster/cheaper may be okay for those.
21 However, for casework, every sample is critical and very
22 limited and you want to get the best yield possible. So
23 that, moving forward, based on the data that were presented
24 in Project 13, was not responsible, and that can cause
25 problems in subsequent casework in reducing yield and
26 reducing results that could be useful, both for inculpatory
27 and exculpatory comparisons.

28
29 MR FOX: Professor, any comments you want to make in
30 addition to what has been said on that topic so far?

31
32 ADJUNCT PROFESSOR WILSON-WILDE: Yes, thank you. I think
33 probably the only thing I would add - I'll just support the
34 concept around a proper approval process is necessary prior
35 to implementation. That should have been done before.

36
37 I was also quite concerned around the dates issue, it
38 just looked like a lot of that data was being put into the
39 report post implementation, which is highly unusual and not
40 consistent with good practice.

41
42 The other thing I would probably suggest, reading the
43 report, is it indicates some of the critical thinking might
44 not have been there, some of the data isn't consistent
45 across the report, and that really should have raised a red
46 flag or at least should have been explored further or
47 explained. So that's probably the only thing I have to add

1 to what the other scientists have already discussed.

2

3 THE COMMISSIONER: Can I ask - there are two matters that
4 arise out of that, and I'm not sure - it is a factual
5 matter, Mr Fox, I'm going to address it to you. I can't
6 recall the exact detail at the moment but I thought there
7 was some evidence yesterday from Mr Nurthen as to what was
8 the method applied when they first started in terms of
9 different classes of samples initially, with a distinction
10 drawn between break and enter type of things and major
11 crime, and I don't know if these witnesses can answer that,
12 because it was a factual matter that we're going to have to
13 track through, I think it may have to come from records or
14 something, to work out whether that happened.

15

16 The other one was I think Mr Nurthen, in terms of
17 proceeding with that method, I think gave some evidence,
18 and I'm trying to summarise it and I may not get it a
19 hundred per cent right, of course, that they weren't as
20 worried about proceeding despite the yield data in
21 Project 13 because he formed the view that the comparison
22 was with the manual method, but that he had an opinion, or
23 there was a view - I don't know how to characterise it -
24 that the quality of the DNA was so much better with this
25 method over the previous method that he was - and that they
26 were going to amplify everything, that he was still
27 content - that's not his word, that's mine - to proceed
28 using it, because it was still sufficient for purposes,
29 I suppose.

30

31 That's just a summary, perhaps, of what he was saying,
32 but it was because it was his comparison of this
33 methodology with the Chelex methodology gave - he accepted
34 it was less quantity but higher quality - he said higher
35 quality. So I just don't know if these witnesses can
36 answer that. I don't know - Dr Wright, thank you, I will
37 come to you - because I think what you have just all said
38 raises that issue. It doesn't get over it, if you know
39 what I mean, because if there was any major crime scene -
40 obviously, the principle is correct, you can't afford to
41 lose, I think Dr Wright used the word "precious" samples,
42 and I think some of the other witnesses also described them
43 in that sense. But I was just - I think Dr Budowle called
44 them critical and limited, so you understand the issue I'm
45 raising now. If you can help me clarify that, I would find
46 that very, very helpful, Dr Wright.

47

1 DR BUDOWLE: I might be able to help you with that. Any
2 time when one --

3

4 THE COMMISSIONER: Okay, we'll go to Dr Budowle.

5

6 DR BUDOWLE: Okay, I'm sorry. Yes, any time one wants to
7 make a comparison to a previous procedure, one needs to
8 take DNA prepared at the same time and run, say, the Chelex
9 procedure side by side with the new or intended procedure
10 to be tested, because you have to know you have the same
11 samples, created under the same conditions, and then you
12 need to apply those results, as well as some other
13 performance issues that happen when you're using different
14 extraction procedures, which I'll mention in a minute. So
15 when you run it, you do side by side so that you can have
16 a controlled experiment with the same samples, the same
17 process.

18

19 Saying that "I had a procedure run previously that was
20 low yield" has no meaning if it's not run with the same
21 samples. So that's, again, a lack of this controlled
22 experimentation that we've seen in there.

23

24 The other is, Chelex is a procedure that uses - that
25 has been used for many years. It doesn't always clean up
26 the samples well, so the downstream performance can be
27 impacted one way or the other. So you would want to run
28 them side by side to see if the downstream performance -
29 the generation of the DNA profiles, the amount of signal,
30 the quality of those - are also impacted in a side-by-side
31 experimentation.

32

33 This is just, again, just another example of not doing
34 it in a controlled fashion to be able to make those
35 statements that Mr Nurthen - that you said he made
36 yesterday. So I just see it's the same kind of problem
37 with not doing a proper study.

38

39 THE COMMISSIONER: Yes. I don't think it derogates at all
40 from the opinion about the methodology of the validation;
41 it was, rather, he gave - it was the evidence that he gave
42 about his thinking at the time of why they proceeded.

43

44 I very much appreciate that answer, Dr Budowle. It
45 doesn't take away from the objective manner of the way in
46 which it should have been done that you have described, but
47 I was just trying to see if anyone could help me with the -

1 yes, if anyone else can help me, but I think Dr Wright
2 wants to make an observation about that as well.

3

4 DR WRIGHT: The evidence from Ms Ientile was that it was
5 a staged approach to introduction, they didn't just start
6 using that --

7

8 THE COMMISSIONER: That was her evidence. I forget who
9 said it. Somebody said it yesterday.

10

11 DR WRIGHT: Yes, it was Ms Ientile, and they started with
12 the volume crime and then they started to introduce other
13 kinds of samples.

14

15 What struck me yesterday was that there was, I guess,
16 a lack of concern about introducing the method and you're
17 right, Mr Nurthen didn't express a concern because he
18 thought that it was comparable with the Chelex method, and
19 Ms Ientile also made that comment, that the kind of yields
20 that they were getting from even the automated method were
21 comparable.

22

23 THE COMMISSIONER: I don't think they used the word
24 "comparable"; I think it was rather the concept that they
25 could still be useful. I mean, you know --

26

27 DR WRIGHT: Yes, they were still getting sufficient DNA,
28 they thought, to be able to generate a DNA profile. But my
29 statement - I did a comparison, it's figure 4 in my
30 statement, page 18. The automated DNA IQ method, so the
31 Project 13, and then later on the Project 21, was actually
32 recovering half as much DNA as the Chelex method, and what
33 is interesting - I'm not sure if we want to --

34

35 THE COMMISSIONER: My question - I don't think anyone is
36 disputing that the quantitative yield is less, but the
37 evidence yesterday was that it was quantitatively less but
38 qualitatively better.

39

40 DR WRIGHT: Yes.

41

42 THE COMMISSIONER: I think Dr Budowle has just also said,
43 I think, as I understood his evidence, that Chelex does
44 have problems with that. I'll come to you in a second.
45 I'm going to say "Dr Wilson-Wilde", it is a lot easier than
46 the longer sentence of "Adjunct Professor", if you don't
47 mind, if you're happy with that. Sorry, I will let

1 Dr Wright finish.

2

3 DR WRIGHT: No, I agree that the DNA IQ method does
4 provide a cleaner sample. I do agree with that.

5

6 THE COMMISSIONER: Right. Yes, Dr Wilson-Wilde, can you
7 help me with this? It is just to try to put that evidence
8 into the context of what we're talking about here.

9

10 ADJUNCT PROFESSOR WILSON-WILDE: Sure. Probably not
11 directly in the sense that I have found no evidence, with
12 the documents that I have received to date, of a direct
13 comparison between the Chelex method as it was used and
14 then the implemented method as it was used, and so that --

15

16 THE COMMISSIONER: The implemented automated method.

17

18 ADJUNCT PROFESSOR WILSON-WILDE: Yes.

19

20 THE COMMISSIONER: Because one of the earlier projects
21 compared Chelex with the manual, I think.

22

23 ADJUNCT PROFESSOR WILSON-WILDE: It did, but the manual
24 method was a different method again.

25

26 THE COMMISSIONER: That's right. No, I understand that.

27

28 ADJUNCT PROFESSOR WILSON-WILDE: It goes to the point of
29 using - reducing all the variables down and so ensuring you
30 have the same blood samples taken at the same time, as
31 Dr Budowle mentioned before. However, I do have - I can
32 point you to it because I don't have a recollection of any
33 other detail other than I am aware that there was an
34 exhibit in Inspector Neville's statement in the first
35 Commission of Inquiry that talked to success rates from
36 blood swabs over the different years when the different
37 methods were in place. So it's a pointing to that that may
38 assist you in some way, but --

39

40 THE COMMISSIONER: Thank you. I think from what I have
41 understood you to be saying, that may have been in the mind
42 of the people doing the validation, if we can call it that,
43 in inverted commas, but even if that was the case, even if
44 it was theoretically possible to retrieve sufficient DNA or
45 that the DNA retrieved was sufficient to test, it was not
46 acceptable practice to just go ahead and do that without
47 doing the sort of control that Dr Budowle talked about,

1 which would have been to compare it directly - the various
2 steps you would take to compare it directly with the Chelex
3 method and to actually do it on a step-wise process, which
4 is the system you have described earlier; is that a fair
5 statement? Does that sound reasonable? Dr Wright?
6

7 DR WRIGHT: I would suggest that the automated method that
8 was introduced would not obtain DNA profiles when the
9 Chelex method would be expected to, based on the yield
10 differences but that's at the lower -- -
11

12 THE COMMISSIONER: But we don't know. The point is we
13 don't know.
14

15 DR WRIGHT: At the lower scale.
16

17 THE COMMISSIONER: We don't know. I mean, as I understand
18 it, I don't think there is a dispute that the quantity was
19 a lot less.
20

21 DR WRIGHT: Yes.
22

23 THE COMMISSIONER: What we don't know is a side-by side
24 comparison that Dr Budowle talked about.
25

26 DR WRIGHT: Correct, yes.
27

28 THE COMMISSIONER: Which is a direct comparison of the
29 larger, less qualitative Chelex method and the lower
30 quantity, higher quality automated method. We just don't
31 know.
32

33 DR WRIGHT: Yes.
34

35 THE COMMISSIONER: That seems to be the
36 problem - a problem.
37

38 MR FOX: Indeed. Thank you. So just in relation to the
39 Commissioner's two points that were raised, that's in -
40 firstly it was about the different classes. Was it
41 appropriate to proceed with respect to different classes of
42 crime?
43

44 Just so that, Commissioner, you are aware, this is in
45 the vicinity of pages 81 and 82 of the transcript from
46 yesterday, and Mr Holt's question was:
47

1 *In other words, go-live involved*
2 *a relatively small part of the workload,*
3 *probably not by numbers, but lower-volume*
4 *crime, not dealing with that major crime*
5 *material, and there was to be a process of*
6 *optimisation that you were to lead in that*
7 *respect?*

8
9 Mr Nurthen said:

10
11 *Possible. I don't - I didn't recall the*
12 *volume crime being the only samples, I just*
13 *assumed that all the - all of major and*
14 *volume were going on there, I don't*
15 *actually have a recollection of that.*

16
17 So I think that's really the clearest that the evidence was
18 on that.

19
20 Do you wish the experts to comment any further on
21 that, Commissioner?

22
23 THE COMMISSIONER: No, I don't. I think the expert
24 comment on that has been given.

25
26 MR FOX: Thank you, it's sufficient. Could I then just
27 indicate that I did say I would come back to this, this is
28 the file notes that were taken by Ms Ientile, this is just
29 on the eve of going live, and these are exhibits to
30 Mr Nurthen's declaration, or statement.

31
32 You will recall his evidence - it was in his main
33 statement at paragraph 89 - where he said that he had
34 raised with Ms Ientile these concerns about low yield and
35 that, having raised it, the decision was, nevertheless,
36 taken to go live. I just wanted to invite Ms Veth,
37 firstly, you are familiar with that evidence; is that
38 right?

39
40 MS VETH: Yes.

41
42 MR FOX: Would you like to pass any comments you have to
43 make in relation to that interaction between Mr Nurthen and
44 Ms Ientile and then the decision that was made to go live
45 from that point?

46
47 MS VETH: Only that I don't understand the decision. It

1 certainly wasn't supported by a completed validation
2 document, and clearly there were concerns held by
3 Mr Nurthen about the performance of the method. Other than
4 that, I can't speak for anyone about, you know, in terms of
5 why they made the particular decision.

6
7 MR FOX: Thank you.

8
9 Dr Budowle, do you remember that written evidence of
10 Mr Nurthen and also those two file notes of Ms Ientile, and
11 if so, would you venture into the territory of making your
12 observations in response to that?

13
14 DR BUDOWLE: I think I already raised that issue earlier.
15 They're scant notes, so I don't know all the communication
16 or what was actually said in there. All we have is that
17 there is some yield issues, and given that the yield was
18 a problem raised, I don't know what other decisions were
19 made or what samples might have been considered, because,
20 as we said, if it was just reference samples, known samples
21 coming from a source, one could say, "Let's go ahead then
22 and move forward and optimise", and maybe that's a thought.

23
24 The other is if it was for everything, that would be
25 more problematic and not supported. So all I can say is
26 the notes themselves don't suggest a sound decision, given
27 it would be applied to all samples.

28
29 MR FOX: Professor, your observations?

30
31 ADJUNCT PROFESSOR WILSON-WILDE: I would have preferred to
32 see a completed and approved validation report prior to any
33 implementation, and so it's not a decision I would make.

34
35 MR FOX: Dr Wright?

36
37 DR WRIGHT: It was TN30 where Mr Nurthen quantified his
38 concerns in terms of the difference of yield between the
39 automated and manual, and he conveyed that to Ms Ientile as
40 being 50 per cent. So he's raising very significant and
41 valid concerns, and in his statement, he explains his
42 thinking at the time, saying, "My concern was that the
43 yields would not be as sensitive to extract lower amounts
44 of DNA." So that suggests to me that Mr Nurthen was very
45 aware of the significance of the difference in yield and
46 the impact that that may have on crime scene samples. So
47 that decision to implement that method definitely should

1 not have been made.

2

3 MR FOX: Can I then turn to the related topic of - I used
4 the word yesterday in the oral evidence - "persistence" -
5 that is, persistence with the automation, going live and
6 beyond. There was the contamination issue, which was dealt
7 with at some length before the first Inquiry, though. When
8 I raise the notion of persistence, I'm really talking about
9 the period where there had been the decision to go live;
10 there's contamination that arises, it's then brought
11 offline. It is really in that period, July 2008 - so
12 October 2007 to July 2008. There's a topic about
13 persistence beyond that, but we will come to that
14 separately when we talk about reimplementation.

15

16 So I just wanted to invite, firstly, the Professor in
17 relation to that earlier period, October 2007 from going
18 live to July 2008, when it was pulled off: do you have any
19 observations to make about the way in which the laboratory
20 automation team itself persisted with this whole process of
21 automation?

22

23 ADJUNCT PROFESSOR WILSON-WILDE: It's not a process
24 I would advocate for. Again, I would want to see that
25 there was a direct improvement by direct study compared to
26 current methods before going live. I would want to see
27 a fully validated system whereby you understand the working
28 limits of the method that you are operating, limitations.
29 There should be repeatability, reproducibility, studies to
30 look at the validity and reliability of it. I don't think
31 there was enough information in that report for the
32 scientists to understand that, and I don't think that's
33 something you can do post implementation, and so it's not
34 an approach I would take in implementing a method of that
35 nature.

36

37 It's really hard - I don't understand why it was done
38 that way.

39

40 MR FOX: Dr Wright, would you like to venture into the
41 territory of persistence with respect to that particular
42 chronology, that particular time frame that I was
43 describing earlier?

44

45 DR WRIGHT: Yes, so between October 2007 and July 2008,
46 there's no evidence to suggest in that time period that any
47 significant adjustments were made or that the yield issue

1 was fixed. The last information of the Project 13 report
2 is dated August 2008, so that's post that July 2008 period,
3 and from what I heard yesterday in the testimony,
4 Mr Nurthen said, as new tweaks were done, as new data was
5 being generated, they would drop it into further iterations
6 of the report. So I would have to just rely on what
7 Mr Nurthen said and rely on that August 2008 report, which
8 still shows there hadn't been any significant improvements
9 made. So, yes, I do believe in that period that you have
10 suggested, it wasn't working and it absolutely should not
11 have been used on any kind of casework samples.

12
13 MR FOX: Ms Veth, would you like to add your observations
14 in relation to this topic of persistence in that October
15 2007 to July 2008 period?

16
17 MS VETH: I don't have anything to add. It's very strange
18 to me that the method was implemented based on the very
19 little data that they had, which did not support
20 implementation.

21
22 MR FOX: Dr Budowle?

23
24 DR BUDOWLE: I don't have anything more to add on this
25 topic.

26
27 MR FOX: Thank you.

28
29 If I can then turn to the reimplementation report, and
30 just before I do that, so we're now moving across, beyond
31 the contamination area that was dealt with by the first
32 Inquiry, and we're in the period around early 2009, when
33 the decision was made, eventually, to reimplement, and
34 I think it was in August 2009 that it officially was
35 reimplemented. Before I get you into that territory,
36 because the chronology is now moving on, is there anything
37 anybody wants to say up to that point to add to anything
38 that has been said previously on the topics discussed?

39
40 DR WRIGHT: No, only that it appears that they were very
41 concerned with fixing the method in relation to the
42 contamination issue and the changes that were made appear
43 to be focused at fixing the contamination issue, you know,
44 post that period and prior to reimplementation. There is
45 no mention and no documentation stating that there was
46 a dual aim, to also fix the yield issue. There's nothing
47 documented or no document that I could find that stated

1 that, in that period.

2

3 MR FOX: Thank you. Unless there's anything further, we
4 will move into the reimplementation report.

5

6 So this is, Commissioner, at item number 29 of the
7 tender list, and it's, for those of you who have
8 Mr Nurthen's first major report, it's the exhibit TN32,
9 it's the report dated April 2009 [LAY.010.011.0624].

10

11 Firstly, could I just confirm that -a nod is fine -
12 everybody has actually read it and comprehended it?

13

14 (Dr Wright and Adjunct Professor Wilson Wilde nodded)

15

16 Dr Budowle, you have read the implementation report?

17

18 DR BUDOWLE: I haven't gone in depth on that but I'm going
19 to have to pull it up to refresh, so just start with
20 someone else and I will get back to you. Which TN number
21 was that again?

22

23 MR FOX: TN32.

24

25 DR BUDOWLE: Okay.

26

27 THE COMMISSIONER: Ms Veth, have you read it?

28

29 MS VETH: Yes, I have.

30

31 MR FOX: Ms Veth, you've read that?

32

33 MS VETH: Yes. Yes, I have.

34

35 MR FOX: Sorry, Dr Budowle, you had something to say?

36

37 DR BUDOWLE: No, I just said I read it when I went through
38 the documents but I have to go back and recall what it is
39 to give you more detail, so you can come back to me in a
40 minute, I guess.

41

42 MR FOX: Thank you.

43

44 So firstly, can I start with Dr Wright. Would you
45 like to just provide your introductory observations in
46 relation to the reimplementation report, what it says and
47 what you understand it's endeavouring to achieve?

1
2 DR WRIGHT: The stated aims of the report seem very
3 focused on testing the measures taken to fix the
4 contamination issue. They do talk about efficiency, but
5 they don't clearly state that there was a DNA yield
6 recovery issue and measures were taken to fix that. So it
7 does seem to really be directed at testing the changes made
8 to fix the contamination issue.

9
10 There is one section of the report - and Mr Nurthen
11 refers to figure 8 on page 14 in his statement, and he
12 refers to this figure as a reassurance of the changes that
13 had been made to the protocol seem to have resulted in, you
14 know, exceptionally well or very good yield recovery. And
15 you can see it at first glance of figure 8 in TN32, it
16 appears to have 100 per cent recovery rate, and even down
17 to very low quantities. So in his testimony yesterday, he
18 seemed to have reassurance that that experiment was done
19 and those results were obtained.

20
21 But when you actually look at the method, the actual
22 experiment that was done to generate those results, they
23 used genomic DNA, so in other words, they purchased --

24
25 THE COMMISSIONER: I think we went through this yesterday,
26 Dr Wright,

27
28 DR WRIGHT: Yes.

29
30 THE COMMISSIONER: I'm sorry to interrupt, but I think
31 that was clarified with Mr Nurthen yesterday, that that was
32 a known quantity, it didn't do the same thing, and that it
33 was - yes, I think he called it an efficiency control.

34
35 DR WRIGHT: Yes. So that alone - it didn't test the
36 end-to-end DNA extraction process, and it was a deviation
37 of the way that they did their sensitivity studies in
38 projects 9, 11 and 13. So they didn't extract --

39
40 THE COMMISSIONER: It wasn't - I think he conceded
41 yesterday that it wasn't - it didn't deal with extracted
42 DNA.

43
44 DR WRIGHT: Correct.

45
46 THE COMMISSIONER: It was dealing with a known - it was
47 a control that dealt with a known quantity of DNA just from

1 putting that through the system. I think we went through
2 that yesterday.

3

4 DR WRIGHT: Yes. So nowhere else do they perform any
5 other experiments that actually test the end-to-end
6 extraction process. So that was my main observation with
7 the reimplementation in 2009. There's still no data to
8 demonstrate that the entirety of the DNA extraction process
9 was working.

10

11 MR FOX: Ms Veth, would you like to add your comments on
12 that reimplementation report?

13

14 MS VETH: I mean, clearly this report is more thorough
15 than the original Project 13 report. It did have a stated
16 purpose, to try and overcome these contamination issues,
17 and I think they went to a lot of effort to do so. And
18 I agree with Dr Wright, that this sensitivity study isn't
19 really comparable, and we still don't know what sort of
20 yield this particular method is generating, based on this
21 particular study. That's all I really have to add.

22

23 THE COMMISSIONER: The yield - are you agreeing, Ms Veth,
24 that we don't know the yield with respect to any extracted
25 sample?

26

27 MS VETH: Exactly. Exactly.

28

29 MR FOX: And Professor?

30

31 ADJUNCT PROFESSOR WILSON-WILDE: My concern about this
32 study is that it's largely a study around contamination and
33 given the number of changes and the significance of those
34 changes that they made between the previous method and this
35 reimplemented method, I would have preferred to have seen
36 a full validation of it. It should have had the full
37 sensitivity, repeatability, reproducibility, it should have
38 had the full study, you know, casework samples, mock
39 casework samples, et cetera, that that validation study
40 should have been compliant with current practice and
41 current guidelines around validating automated methods.

42

43 So for me, this wasn't a validation either, and
44 I think that's a really key aspect. Whilst I acknowledge
45 that they did look at the on-deck component of it, I agree
46 that you do need to test the end-to-end process and have
47 that comparison to your current method as well, and I don't

1 see any of that either. So I think for me, this
2 reimplementation is not consistent with good practice
3 either.

4
5 MR FOX: Thank you.

6
7 Dr Budowle, I appreciate you haven't turned your mind
8 in detail to the report. You may not wish to add any
9 comments. Do you wish to --

10
11 DR BUDOWLE: Yes, I went back to brush up on this.
12 I focused on the same issue that has been discussed by the
13 three other experts here. But I'm a little troubled with
14 the explanation that this was just an efficiency test,
15 because I'd marked on my copy the interpretation, which
16 was:

17
18 *Testing results indicate that the modified*
19 *automated ... procedure is very sensitive*
20 *and able to isolate low copy number DNA*
21 *samples at a very high recovery rate that*
22 *is close to 100 per cent.*

23
24 And then again:

25
26 *... the modified ... procedure will be able*
27 *to recover most if not all of the DNA that*
28 *is present in a sample.*

29
30 That's very different than the explanation of just trying
31 to test the efficiency of purified DNA. So reading the
32 report, I come to a different conclusion than what has been
33 discussed or may have been discussed yesterday by
34 Mr Nurthen, if that's what accurately was portrayed, that
35 it seems that this was an experiment to justify sensitivity
36 of the assay and you can't do that with the test that was
37 performed.

38
39 MR FOX: Thank you. So if we know that this report having
40 been produced, this appears to be the basis to justify the
41 reintroduction of the automated system. I used the word
42 before, "persistence", when we looked at the question of
43 October 2007 to July 2008, I'm going to revisit that notion
44 now.

45
46 So we know that the laboratory persisted from the time
47 of this reimplementation report, and, indeed, come,

1 I think, 20 August 2009, there is actually the
2 reintroduction of the system.

3

4 Can I firstly ask, Dr Wright, your comments in
5 relation to that notion - that is, the persistence of the
6 laboratory with the reintroduction, despite the
7 observations that have been expressed by all four of you
8 regarding the nature of this particular report?

9

10 DR WRIGHT: Do you mean the ongoing use of it from 2009
11 onwards?

12

13 MR FOX: Yes. So we know that the laboratory has formed
14 the view that this document is a basis upon which they can
15 be satisfied that there should be a reintroduction of the
16 automated system. You have all made various comments about
17 inadequacy of the document. Nevertheless, the laboratory
18 chose to go forth and use it. Do you have any observations
19 to make about their persistence with it going forward from
20 that point?

21

22 DR WRIGHT: There is still no proof that any further
23 improvements were made post that October 2009. So there
24 still seems to be no documentation, no research done to
25 improve the method between 2009 and 2016.

26

27 A question was asked of Mr McNevin in terms of he was
28 the manager of the analytical section where this method was
29 being used, and with any method, you have positive and
30 negative controls - positive controls are samples of known
31 blood and known cells, you are expected to get a result,
32 you put those samples on a batch of crime scene samples,
33 and if that positive control has passed, you should get
34 a profile.

35

36 And I think, Commissioner, that was a question you
37 asked of Mr Nurthen, whether the positive controls had been
38 working, because I think that's a really good indication of
39 how this method was performing. But what Dr Budowle and
40 Ms Veth and I found in the 2006 - sorry, in the module 6
41 for the 2022 Commission of Inquiry, we looked into this,
42 because it appeared as though the Shandee samples, the
43 positive controls were passing, and passing quite
44 spectacularly. But when we dug into it, we found that the
45 analytical section wasn't appropriately checking their
46 positive controls. They were checking the final graph at
47 the end; they weren't checking the concentration value of

1 the positive controls.

2

3 Now, you would expect, if you checked the final graph
4 and it looked great, it should all be fantastic, and it
5 fooled me, I originally saw the positive controls and
6 thought they had passed. But what they were doing is, if
7 any sample, a crime scene sample or a positive control,
8 resulted in a low concentration of DNA, there was an
9 automatic software method that would tell the next step of
10 the process, which is the amplification, to simply put more
11 DNA in. So if a positive control was failing, you wouldn't
12 know, because the automated process, this software, would
13 say, "Okay, instead of adding 1 microlitre, add 15".

14

15 THE COMMISSIONER: The added DNA that you put in, that
16 would not be the sample DNA?

17

18 DR WRIGHT: Yes, so the sample of the positive control,
19 you can add up to 15 microlitres in amplification.

20

21 THE COMMISSIONER: Yes, but that - so you would add to the
22 positive control sample?

23

24 DR WRIGHT: It's how much of the positive - the extracted
25 positive control sample you would add to your
26 amplification. So you could add up to 15 microlitres. But
27 what was happening in the laboratory --

28

29 THE COMMISSIONER: What about the test sample?

30

31 DR WRIGHT: Yes, as well as. So the quantitation step
32 indicates how much DNA you should add in your amplification
33 step. If it is a really rich source of DNA, if you have
34 a lot of DNA, you might only add 1 microlitre, because you
35 don't want to over amplify. I called it the Goldilocks
36 principle, you know, not too much, not too little, just
37 right. So that's what the concentration does. So there
38 was software to work out, based on the concentration we're
39 observing, how much of that sample should you then put in
40 your amplification.

41

42 THE COMMISSIONER: Would it make the same decision for
43 both the control and the test?

44

45 DR WRIGHT: Yes, and that was the problem. So if the
46 positive control was actually failing, as in only obtaining
47 that very low concentration, this software would say,

1 "Well, we had better add 15 microlitres in there, the
2 maximum amount", and, of course, you get a lovely profile
3 at the end. So they weren't checking the concentration
4 values, and what we found in our analysis in module 6 is
5 that quite a lot of - and this is in - we had a year's
6 worth of data from 2012 - quite a lot of the extraction
7 batches, the positive controls, are actually failing. And,
8 sorry, Dr Budowle and Ms Veth, I probably didn't explain
9 that as well as either of you could, but do you have
10 anything or any further explanation of what we found?

11
12 MS VETH: No, you're quite correct. I know that I also
13 was a little bit fooled by the comments that the positive
14 controls were passing without actually having - for the
15 longest time in our work for the previous Commission, we
16 didn't have the quantitation data, but when we got it, we
17 sort of saw straightaway that there was an issue with the
18 concentrations of some of the positive controls that
19 obviously should be a reasonably rich source of DNA but
20 that they appeared to be having - appeared to have low
21 concentrations compared to positive controls extracted
22 using a different method. I'm sorry, I've sort of lost
23 track of what --

24
25 THE COMMISSIONER: I don't quite understand that. When
26 you say - I mean, there is the extracted DNA, which is in
27 the test sample, and the control, which is a known amount
28 of DNA, that is not extracted; it's just an amount of DNA
29 you put in, isn't it?

30
31 MS VETH: No. An extraction positive control is normally
32 a sample of blood and it is extracted along with the batch
33 of samples. So it is treated exactly the same way as the
34 test samples.

35
36 THE COMMISSIONER: I see. Okay, sorry, I understand. So
37 this is not the sort of test that TN32 is talking about?
38 That's not --

39
40 MS VETH: No, we're talking about actual casework.

41
42 THE COMMISSIONER: Right. So the positive control is
43 extracted at the same time as the sample to be tested.

44
45 MS VETH: That's correct. And if there is a problem with
46 the positive control results, then that indicates that
47 there may well be a problem with the extraction as a whole.

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THE COMMISSIONER: Sure, I understand.

MS VETH: Or some part of the extraction.

MR FOX: Thank you. While we are with you, and I don't want to cut Dr Wright off - sorry, Dr Wright, I probably should just check, did you have anything more that you wanted to say? I appreciate there was a bit of an exchange there. I wanted to move into the point about persistence.

Ms Veth, you heard the question earlier on about persistence and there's been the dialogue between yourself and Dr Wright. Do you have any observations to make about my point about persistence with the reimplementation in light of this particular report?

MS VETH: Only that we still don't seem to have sensitivity data to support the use of this method. We still have questions about the yields of DNA that the method is producing, and I understand there were some assumptions made that it didn't matter that the yields were low because the profiling results were better, or better than Chelex, but I haven't seen any data to support that anywhere, and I would just - I would challenge that that is actually the case.

MR FOX: Dr Budowle, would you like to venture your comments, please?

DR BUDOWLE: I'll add on to Johanna Veth's comments. We all have ideas in our heads of how something might work or not work when we set up experiments or - and, yes, then we set up experiments to determine whether or not those hypotheses are supported or rejected, and if we don't have the data for it, and in this case, we don't have more, but it also speaks to a deeper problem and it is about quality assurance and quality control in the laboratory, because when one looks at the samples, the control samples, and, as has been said, things were adjusted to make them all look like they are running well, it was only looking at things one dimensionally, and so we have to be concerned that maybe the laboratory didn't have a full appreciation of what a quality system is, and so some things fell to the wayside that might have been better with all the proper kinds of studies and documentation that would be needed, and maybe perform more on "This is my belief" and went

1 forward. So that's where I think a big gap is in the
2 implementation - with the testing and then implementation.

3

4 MR FOX: Thank you. Finally, Professor?

5

6 ADJUNCT PROFESSOR WILSON-WILDE: Thank you. Yes, there
7 seems to be a lack of recording the experiments or the work
8 that they have done contemporaneously, and so, you know,
9 there was lots of discussion around exactly that, but there
10 is no real record of it. And whilst I was pleased to see
11 them go back to a manual lysis step in the process, which
12 means that they are essentially going back to the manual
13 method for at least a portion of the process, I don't see
14 them having thoroughly tested that in a way that I would
15 have preferred. And so - and then documenting it,
16 et cetera. So it's really hard to make a comment on what
17 they have done, because they just don't seem to be having
18 that level of quality record keeping, et cetera, that
19 I would expect at the time.

20

21 MR FOX: Thank you. Now, I was going to move on from the
22 reimplementation report to a further topic, but I think
23 we're nearing the end of the first major area of discussion
24 for this morning, and indeed, that's the major topic for
25 the whole of our concurrent evidence. I nearly said the
26 dreaded phrase, but anyway, but unless there is anything
27 further that anyone wants to make about - comments about
28 the reimplementation report, I was going to move to a new
29 topic.

30

31 ADJUNCT PROFESSOR WILSON-WILDE: Could I just make
32 a comment more generally? In terms of a lot of these
33 projects, the other thing, in addition to running the
34 methods, the old method/new method, you know, or proposed
35 changes, et cetera, I would have also preferred to see all
36 of the analysis, or at least the major ones, run through
37 from beginning to end, to profile generation, and that
38 would have elicited a little bit more information around
39 what was happening.

40

41 I think some of the design of some experiments is not
42 what I would like to see in terms of being able to analyse
43 the information that has been generated to see, if you have
44 a problem with the process, so you are not getting the
45 yield that you would like to, a slightly different design
46 of the study, running it through to profile would actually
47 tell you where or give you more information about where the

1 issue might actually lie.

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Because there is so little information, you can't tell whether some of the problems might be with the samples that you are using, because of multiple donors - how were they using those? Are they using one donor for one experiment, another donor for another? Is there something, maybe a little thing, that's going wrong with their quantitation step? Is their standard curve still applicable? Because that's really important for calculating out your quantitation values. You know, the cell count, how is that done? If I was seeing a systematic low level of DNA from particularly blood samples, but it's okay from buccal samples, then that would make me want to have a look at the blood samples themselves and maybe get them analysed independently by another laboratory with another method, just to make sure it's a comparable amount.

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That was where I was coming back to that critical thinking component, about looking at the data, looking at the data generated across different aspects or different studies within the one project, to see if the results actually make sense for what you think you should be getting, and if there is a result that's not quite what you expect, actually digging down and seeing why that might be and not just relying on adjusting the components of the test that you are doing, but looking at it from an end-to-end process about what other components within that process might also be affecting the results. So that's probably just a kind of general thing, and it plays in the part where there are experiments where there are multiple variables at play, so you've got a result but you can't tell what variable has elicited that result. There is a little bit of that in there. It is really hard to pull out the meaning of some of those experiments.

37

38

39

MR FOX: Dr Wright, did you have anything you wanted to add before we move on.

40

41

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DR WRIGHT: Yes. It reminded me of something that Dr Hlinka raised yesterday, which I thought was interesting, they chose to use just the one protocol on blood and cells across a wide variety of substrates and the comment was made that that was preferable, if you have one method, you only have to do one validation rather than do a validation for blood, a validation for cells, a validation for tape-lifts, so that's what they seemed to

1 persist with, and I just wonder if - again, I'm speculating
2 - whether, you know, that was some sample types suffered on
3 a particular method that wasn't suitable for that
4 particular substrate or that particular biological type.
5 Some labs have a specific protocol for blood, a specific
6 protocol for cells and so forth. So some of the sacrifices
7 that may have been made by just having a one-size-fits-all
8 DNA extraction method might have been that some sample
9 types were not performing as well as they could have if
10 they had their own optimised method.

11
12 Mr Fox, were you moving away from Project 13?

13
14 MR FOX: Not at all.

15
16 DR WRIGHT: Okay.

17
18 MR FOX: Not entirely. I will provide an opportunity for
19 any residual comments on Project 13 when we get to all the
20 various topics that we will hopefully tick off in
21 everyone's minds as to things they want to say.

22
23 Can I then move to one issue, which is about
24 Project 70. This came up yesterday. Mr McNevin was asked
25 some questions about it. I'm not sure the extent to which,
26 Dr Budowle, you are familiar with this Project 70, which is
27 in 2011, it was a report that was prepared, which was
28 a verification of the Promega DNA IQ for the Maxwell 16, so
29 the different automated platform that was being used
30 instead of the MultiPROBE. Is that a report that you are
31 familiar with? We can identify where it is in the evidence
32 if you would like.

33
34 DR BUDOWLE: Yes, it's one of the reports that I was
35 provided and assessed in the original Inquiry on DNA. It
36 was focused on DNA concentration issues in the original
37 Inquiry.

38
39 MR FOX: Thank you for indicating that. And Ms Veth, you
40 would be familiar with that, of course, from the dialogue
41 that occurred yesterday, as will the Professor and
42 obviously Dr Wright.

43
44 Can I just indicate in relation to that, Mr McNevin
45 gave some evidence about what the nature of the particular
46 report was and what it was - the methodology it had engaged
47 in and the results it had achieved. Because we have you

1 here together and part of it was to obviously provide
2 comments in relation to what you have read and heard
3 yesterday, I didn't want to glance over or gloss over that
4 particular aspect of the evidence. So perhaps I might just
5 start firstly with Dr Wright. Is there anything that you
6 would like to say in response to what you heard yesterday
7 about this particular topic?

8
9 DR WRIGHT: Yes, I acknowledge that Mr McNevin appeared to
10 have only seen that document for the first time that
11 morning or that day, so he was genuinely trying to refresh
12 his memory and go back and understand what was happening.
13 It was back in 2011, and in 2011, they introduced
14 a different robot, and what they were doing is comparing
15 the MultiPROBE robot and the new robot, and there seemed to
16 be some uncertainty about which method was used in
17 Project 70 for the MultiPROBE, and I suggested, based on
18 the SOP number or the standard operational procedure number
19 that was in Project 70, that it was the automated method,
20 you know, the 2009 implemented one. Mr McNevin thought it
21 was the manual method. But Mr Fox, are you able to confirm
22 if that was --

23
24 MR FOX: That's what his evidence - his evidence was that
25 it was a comparison between the manual method and not,
26 essentially, the automated method, I think that was really
27 the off-deck lysis, so what was described as the hybrid
28 version.

29
30 DR WRIGHT: I checked the SOP number last night and it was
31 the hybrid, manual/automated method, so in figure 5 of that
32 Project 70 report, they are doing a comparison,
33 a sensitivity comparison between the new robot and the
34 MultiPROBE robot, and Mr McNevin was asked to comment on
35 that comparison, and he used the analogy of, if you are
36 painting a house, you know, it doesn't matter if you've got
37 10 litres, if you only need 5 litres, you've got some left
38 over. But Mr McNevin was focusing on the right-hand side
39 of the graph, which is where, you know, you've got mock
40 samples that have quite a lot of blood on there, and
41 I absolutely agree with what he said, that at that higher
42 range, in this study, at least, anyway, they were getting
43 enough DNA to be able to obtain a profile, but it is the
44 samples on the left-hand side of that graph, what I call
45 your more trace samples - they were comparing the new robot
46 and the old robot, and the new robot was getting eight
47 times - up to eight times more DNA than the MultiPROBE. So

1 that suggests to me in 2011 that there's still an issue,
2 and this is empirical data - still an issue with the
3 MultiPROBE robot and we're able to quantify that difference
4 or that impact compared to the Maxwell robot or the new
5 robot.

6

7 So it really is those lower quantity samples where
8 we're seeing a genuine difference.

9

10 MR FOX: Just in relation to the - you mentioned about the
11 SOP or the standard operating procedure number, that's
12 24987 - 24897. I want to tease out where the references
13 are. I will just lead you through this. On page 4 - you
14 have the report?

15

16 DR WRIGHT: I've only got parts of the report but I will
17 take your word for it.

18

19 MR FOX: We will be able to pull this up. I want to show
20 you where the references are, and if I've got the wrong
21 ones, you will let us know. So on page --

22

23 THE COMMISSIONER: This is on the same document? It is
24 this document we're talking about?

25

26 DR WRIGHT: Yes, Project 70.

27

28 MR FOX: On page 4 of the document, heading 5.2
29 "Extraction", in the second line, it appears to make
30 reference to QIS24897. Do you have that?

31

32 DR WRIGHT: I'm sorry - thank you. Yes.

33

34 MR FOX: Is that one of the references that you are
35 giving?

36

37 DR WRIGHT: Correct and that appears to be the MultiPROBE
38 method, the automated MultiPROBE method.

39

40 MR FOX: So what you have done is to track through -
41 I think it is Mr Nurthen, actually, who gives all the
42 various different versions. I will come to it in a moment,
43 because I just want to go through these and identify them.
44 Then the other reference that I could find was on the last
45 page under "References", item number 5.

46

47 THE COMMISSIONER: I think Dr Wilson-Wilde might be able

1 to assist.
2
3 MR FOX: No, I was just wondering where the references
4 were. Sorry.
5
6 ADJUNCT PROFESSOR WILSON-WILDE: I am going to add a level
7 of confusion, only because it wasn't clear to me, because
8 I think in that method there is an appendix that also
9 refers to a manual method, and so it's really hard to then
10 actually say without looking at the data whether it was the
11 MultiPROBE method or the manual method. That's my only
12 concern.
13
14 MR FOX: Did you manage to see the appendix? I must say
15 the version I have doesn't have an appendix TO IT.
16
17 ADJUNCT PROFESSOR WILSON-WILDE: All the appendix
18 I believe had the manual method at that time.
19
20 MR FOX: Is that something that you have seen, Dr Wright?
21
22 DR WRIGHT: The appendix?
23
24 MR FOX: The appendix.
25
26 DR WRIGHT: I don't have it with me, no.
27
28 MR FOX: Had you seen it before you expressed your view
29 about what this actually covered in terms of what the word
30 "manual" meant?
31
32 DR WRIGHT: I can't remember, sorry.
33
34 MR FOX: We might let you have an opportunity to check
35 that. Are you able to check that during the course of the
36 morning if we have a break? Thank you, Professor.
37
38 THE COMMISSIONER: Did we receive anything further
39 overnight in relation to that from Mr McNevin?
40
41 MR FOX: No. I know it is on its way.
42
43 On that topic, Project 70 and what we have been
44 discussing, Ms Veth, did you want to add anything further
45 to that?
46
47 MS VETH: No, I cannot tell what method is being compared

1 to the Maxwell. It's somewhat confusing to me.

2

3 MR FOX: Thank you. And I won't trouble - unless,
4 Dr Budowle, you want to say something, because it did
5 involve some of the evidence that was given orally
6 yesterday by Mr McNevin.

7

8 DR BUDOWLE: I was not there so I'm not sure exactly what
9 was said, but my version of Project 70 was on the Maxwell
10 comparison, standing up the DNA IQ system, and the issues
11 that I identified in my report in the original Inquiry, or
12 one of my reports, are the same that has been discussed
13 already about a link in volumes being larger to changing -
14 moving the lysis step before hand, adding chemicals without
15 controlled studies, and some of the failures of the bloods
16 compared to the buccal cells suggested that there were some
17 more fundamental issues still to be worked out. But
18 I don't remember the MultiPROBE as part of that versus the
19 Maxwell.

20

21 ADJUNCT PROFESSOR WILSON-WILDE: Sorry, I may be able to
22 assist in one other aspect. On page 7, in the third
23 paragraph, it talks about the original validation of the
24 manual DNA IQ chemistry gave an average yield of 3 -
25 I think that's 317 nanograms for blood. That is consistent
26 with the Project 11 results for the manual method of the IQ
27 extraction. So it would indicate that the comparative
28 analysis is between the Maxwell and the manual method,
29 which is not good practice, I will be honest. So - yes.

30

31 DR WRIGHT: Yes.

32

33 ADJUNCT PROFESSOR WILSON-WILDE: I would suggest it's
34 probably not the MultiPROBE, that it is the manual.

35

36 THE COMMISSIONER: You would suggest what, sorry?

37

38 ADJUNCT PROFESSOR WILSON-WILDE: It is not the MultiPROBE
39 automated/manual method. I believe what they are actually
40 referring to is a comparison to the Project 11 manual
41 method.

42

43 DR WRIGHT: I agree with you, it seems strange that they
44 are not comparing it to the method that they are actually
45 using at the time. Why would they choose the method that,
46 you know, they implemented temporarily back in I think 2008
47 and then ceased using? If it was the manual method, it

1 doesn't make sense why they did that comparison.

2

3 MR FOX: Thank you. Ms Veth, did you want to venture any
4 additional comments in relation to what you have heard just
5 then?

6

7 MS VETH: No.

8

9 MR FOX: Thank you. Now, the final topic that I just
10 wanted to --

11

12 THE COMMISSIONER: I'm sorry, to make it even more
13 complicated, it says at "Conclusions and recommendations",
14 that it's also shown that this extraction procedure would
15 give results comparable to the current routine manual
16 DNA IQ method, which doesn't help, because the current
17 routine method, presumably, was not the Project 11 method
18 but presumably the automated method. So it seems to be, on
19 the face of the document itself, including the appendix,
20 from what I hear, it seems to be uncertain as to exactly
21 what this comparison was meant to be demonstrating.
22 I think - is that a fair comment?

23

24 DR WRIGHT: The point I would like to make is, regardless
25 if it was the manual DNA IQ method or the automated DNA IQ
26 method, it's clear from that figure 5 that at the lower --

27

28 THE COMMISSIONER: Your comments as to the sensitivity at
29 the lower levels are still relevant.

30

31 DR WRIGHT: Yes, I think this should definitely have been
32 a red flag to the authors to say, hey, we've got one method
33 that seems to be working eight times better than this new
34 robot. That should have been, I think, a trigger to
35 investigate, well, why isn't the DNA IQ method working
36 better? So I guess that's the only point I would like to
37 make about that graph, there is a very clear difference.
38 It doesn't appear as though this was, I guess, acknowledged
39 by the authors or followed up. It was potentially an
40 opportunity for them to investigate why there is
41 a difference, and maybe realise that the yield issues were
42 not fixed.

43

44 MR FOX: Unless there are any additional comments from
45 either Dr Budowle or Ms Veth, we will move to the next
46 topic.

47

1 ADJUNCT PROFESSOR WILSON-WILDE: Can I maybe add one more,
2 it is just a general comment when interpreting these
3 graphs. One of the things that is not clear from this
4 document, and whilst there is a lot more information around
5 the methods used and generation of profiles, and I'm very
6 pleased to say that they have one blood donor, there is
7 a lack of information around how they have standardised the
8 results between the different methods. Some of the issues
9 is these different methods have different elution volumes,
10 so to directly compare the concentration that comes out of
11 each of them is not good practice. The results should have
12 been standardised and equated to what would be the
13 concentration in the equivalent extraction volume. For
14 instance, if you have an elution which is one elution to 50
15 microlitres, and you compare that, your concentration
16 result, to a different extraction protocol --

17
18 THE COMMISSIONER: So it is not a comparison.

19
20 ADJUNCT PROFESSOR WILSON-WILDE: No. And I don't see
21 anything in here around standardising results, and I am
22 actually leaning towards it is indicating that they
23 haven't. So it's just a caution, and I've seen that same
24 approach across different validation studies as well, where
25 they just compare the results directly without
26 standardising the data.

27
28 MR FOX: Dr Budowle, I think you were going to venture
29 some comments?

30
31 DR BUDOWLE: No, I was the one who reviewed this project
32 in my paper on concentration, and we recognised a lot of
33 issues in the design and these are just examples. You
34 know, if you are out there studying, they used different
35 volumes for different things, so for instance when they
36 concentrated samples, they concentrated to 35 microlitres
37 or to 15 microlitres, with no guidance, and so sometimes
38 the result was compared to 15, sometimes to 35, the
39 concentrations would be different, and so one did not know
40 when one would, let's say - you would fire one and not fire
41 the other, and these were consistent problems we saw. So
42 what Dr Wilson-Wilde said is consistent with the
43 observations we had originally.

44
45 THE COMMISSIONER: Sorry, I can't recall exactly what it
46 was originally in the detail, but, I mean, does it come
47 down to the fact that the purported - the conclusions based

1 upon those purported comparisons cannot be supported
2 necessarily from these results?

3

4 ADJUNCT PROFESSOR WILSON-WILDE: I think you would need to
5 go back and actually interpret the data so that you've got
6 comparable results and account for all of the differences
7 in making sure you've got the same amount going in and what
8 you are eluting out.

9

10 THE COMMISSIONER: So that the comparisons - the
11 conclusions they have drawn, in the way they have made
12 those comparisons, cannot really be drawn from the data
13 that they use to draw them?

14

15 ADJUNCT PROFESSOR WILSON-WILDE: Not without doing further
16 analysis.

17

18 MR FOX: Thank you. I just want to start with - these are
19 two questions that are directed to Dr Budowle and also
20 Ms Veth. I will come to Dr Wright in a moment. Now,
21 Dr Budowle, in the first Inquiry, you produced a report of
22 15 September 2022 in which - this is a report you were just
23 indicating, that you were reporting on not concentrating
24 low quantity DNA samples, and at paragraph 14 you indicate
25 that, in commenting on a study, that the initial recovery
26 of DNA - this is a study by QHFSS - initial recovery of DNA
27 from blood samples in a 50 microlitre volume showed low
28 yield. So you have looked at the topic of low yield in the
29 context of that report.

30

31 Armed with now having seen the Project 13 report and
32 having seen the evidence from the various scientists who
33 were associated with that venture, your overall conclusions
34 expressed in your 15 September 2022 report - that is, that
35 there needed to be some exercise engaged in going back and
36 looking at the studies and that it appeared to be that
37 there was something wrong - you venture this conclusion in
38 paragraph 14 - does the provision of this Project 13 report
39 cause you to change your views or to otherwise modify them?

40

41 DR BUDOWLE: I wouldn't change my view based on the data.
42 I think it actually just reinforces my observations in the
43 first study, that it wasn't good validation studies
44 undertaken, the data analyses were limited, and it's
45 probably more of a bias-driven approach towards the goal of
46 getting something online without proper assessments, and
47 I think that is still the opinion I hold today.

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MR FOX: Ms Veth, do you want to indicate whether it causes you to alter any of the opinions that you expressed before the first Inquiry?

MS VETH: So, in the first Inquiry, we noted that there was evidence to suggest there was an issue with the MultiPROBE extraction method, based on the limited data that we had related to the Blackburn case and the extraction control quantitation data. We were unsure if this was like a new issue with the method or whether it had been long term. Having now seen the Project 13, it seems like it was possibly a long-term issue that was never addressed. And so it doesn't actually change - going back to your question, it doesn't change what was stated in the original reports that Dr Budowle and I created for that Commission, but it does raise - it does perhaps suggest the issue was much longer term than we had anticipated.

MR FOX: Thank you. And Dr Wright?

DR WRIGHT: Yes, without access to Project 13 when we were doing our analysis on the Blackburn case, it was something that we just didn't consider, that there was a systemic failure. As Ms Veth said, we saw that there were some unusual results from the Blackburn case, and initially, as a group, we thought it must have just been for a very small period of time maybe something was going wrong, and then we asked for one year's worth of positive control data, for 2012, I think there were something like 1200 samples. Then we came to a conclusion that it was a systemic problem, but we didn't have time to trace it back to 2007, and my testimony during the first Inquiry - I gave the lab the benefit of the doubt. I said that, or I believed, that the method must have stopped failing at some stage after introduction, without anybody knowing. So that was my firm belief during the first Inquiry. Because I simply didn't consider any possibility that a laboratory would have implemented a method knowing that it had yield issues.

So I agree with Ms Veth that it appears that there does seem to be an unbroken chain between the analysis that we did for the Blackburn case and, in 2012, the systemic issues that we saw there, there does appear to be an unbroken chain or no evidence to suggest otherwise, that that failing, that systemic failing, I think, originated back in 2007.

1
2 MR FOX: Thank you. Now, Professor, you don't have to
3 answer this question, just so that you are clear. I'm just
4 going to give you the opportunity, as a matter of fairness.
5 We all appreciate the statement that you have given, and
6 because you were provided with the document but you didn't
7 comment on it in a fulsome sense as you have indicated in
8 your statement, but can I just ask you, then, proceeding on
9 that footing, if you had been directed in a more fulsome
10 sense to investigate that document, would it cause you to
11 change the opinions that you expressed before the first
12 Inquiry?
13

14 ADJUNCT PROFESSOR WILSON-WILDE: I will answer the
15 question, that's fine. In the few hours that I had the
16 document and reviewed it, obviously from a contamination
17 perspective and given the other documentation I had,
18 I would still come to the same conclusion, that the project
19 was not consistent with good practice, it had lots of
20 issues with it, and given the information I had at the
21 time, that was probably appropriate.
22

23 However, given the information I have now and all of
24 the other documentation and all of the experience going
25 over years, I can see that there's - and concede that there
26 is an issue that appears to be with the extraction process,
27 and I also think there are a couple of other issues as well
28 that we need to look into.
29

30 DR WRIGHT: Just one other thing I was thinking of -
31 I actually think it would change some of my - or one of my
32 opinions, in relation to understanding what has potentially
33 gone wrong with that extraction process, in other words,
34 you know, tracing it back to 2007. In relation to the
35 Blackburn case, obviously there's the question of the
36 retesting of the remaining crime scene samples for the
37 Blackburn case, for the samples that were processed on that
38 MultiPROBE. So at the time of the first Inquiry, we were
39 confident that, at that time, the MultiPROBE wasn't
40 working. But again, I had this belief that it must have
41 been properly validated at the beginning so it must have
42 been maybe a bad batch of chemicals or something like that.
43 So the advice - my initial advice was to just go back to
44 the extract and test the extract for the Blackburn samples.
45

46 THE COMMISSIONER: That was clarified yesterday, that
47 going back to the extract would not, in the circumstances -

1 I think Mr Nurthen gave evidence and we clarified with him
2 yesterday that going back, if there was a problem with the
3 extraction procedure, by a matter of logic, you don't go
4 back to the extract, you have to go back to the original
5 sample if it is available.
6
7 DR WRIGHT: Correct. So my initial thinking at the time
8 of the first Inquiry, without seeing Project 13, was just
9 go back to the --
10
11 THE COMMISSIONER: Sorry, if you had said that in your
12 original opinion, that would change now.
13
14 DR WRIGHT: Correct.
15
16 THE COMMISSIONER: I understand that, thank you.
17
18 MR FOX: I wanted then to move to the second substantive
19 topic, but that means we move beyond Project 13 and whether
20 anybody wanted to make any final comments in relation to
21 Project 13.
22
23 DR WRIGHT: I just have three points, Mr Fox. It might
24 take 15 minutes.
25
26 MR FOX: Commissioner, were you going to have a break at
27 all?
28
29 THE COMMISSIONER: It's really up to the witnesses, in
30 many ways and, of course, you know, everyone - you
31 yourself, Mr Fox, have been going for a while. If anyone
32 feels that they would prefer to have a break - I don't know
33 how an extra 15 minutes is going to fit into your timing
34 either.
35
36 MR FOX: I think we're pretty fine at the moment, given
37 the early start, but it might also give Dr Wright an
38 opportunity to consider whether she could --
39
40 THE COMMISSIONER: Condense it.
41
42 MR FOX: She might be able to condense it a little bit --
43
44 DR WRIGHT: Yes, I can condense.
45
46 MR FOX: -- in the break. If we just said 10 minutes --
47

1 THE COMMISSIONER: Let's have a break for 10 minutes and
2 perhaps you can have a think about the matters you were
3 going to raise and whether or not they have been covered or
4 the extent to which they may have been covered. I'm not
5 stopping you. I'm just saying it's always good to have
6 a rethink when events have moved on a little bit. Thank
7 you, I will adjourn for 10 minutes.

8
9 **SHORT ADJOURNMENT**

10
11 THE COMMISSIONER: Mr Fox.

12
13 MR FOX: Dr Wright has a couple of points to make,
14 I think, Commissioner.

15
16 DR WRIGHT: Yes, Commissioner, just two documents that
17 I thought might be relevant to here, and the first one is a
18 Courier-Mail article from September 2007.

19
20 MR FOX: We have the document, Commissioner.

21
22 THE COMMISSIONER: Perhaps you can hand it up so I can
23 have a look at it as she talks. That would be helpful,
24 thank you.

25
26 MR FOX: Yes.

27
28 DR WRIGHT: There were only three sentences that I was
29 going to read out, Commissioner.

30
31 THE COMMISSIONER: That's fine.

32
33 DR WRIGHT: So just to give you a gist of the article,
34 this was a series of articles from 2005, 2006, 2007, about
35 the backlog and the government pledge at the time to -
36 I think it was \$11 million over three years, purchasing the
37 robots. This is the health minister at the time, and
38 I will just read out from paragraph 5, it says:

39
40 *QHSS is on track to clear the backlog of*
41 *DNA cases by the end of the year.*

42
43 Being 2007. The comment that was made by Cathie Allen, who
44 was the acting manager, at the time, of forensic biology,
45 has backed the department's claims.

46
47 THE COMMISSIONER: Sorry, just one quick question. I'm

1 sorry to interrupt your reading. Is this referred to in
2 the Sofronoff report, this factual information?

3

4 DR WRIGHT: No, this is new. I don't believe this was
5 available for the Sofronoff --

6

7 THE COMMISSIONER: Okay, just curious, thank you.

8

9 DR WRIGHT: Yes. The acting manager at the time is saying
10 she is 100 per cent certain they will hit their targets.
11 Later on Ms Allen said that two more of the platforms were
12 expected to come on line "next month", being October, and
13 I just wanted to raise this in terms of some of the
14 testimony I heard yesterday, that the scientists spoke
15 about the need to implement the method to clear the
16 backlog, and I think that this paints a picture of the
17 pressure, the distinct pressure they were under, and now
18 there seems to be a finite - these robots are going to be
19 implemented in October. So I think this - scientists
20 should not be affected by external pressures to complete
21 their work. They have to complete it to a standard that
22 they're happy with. But I just wanted to raise this,
23 because it appears like there are some very serious
24 external pressures that are being placed on the scientists
25 and the lab.

26

27 THE COMMISSIONER: Yes, I understand what you're drawing
28 from this. I'm not sure how far one can draw conclusions
29 as to what was happening day-to-day in the lab from this.

30

31 DR WRIGHT: Yes.

32

33 THE COMMISSIONER: But I note the context that you're
34 raising.

35

36 DR WRIGHT: Yes, thank you. And just the second document
37 relates to Ms Ientile's statement dated 28 October 2023,
38 and its attachment 2.

39

40 THE COMMISSIONER: We'll have to try to get that up.
41 I don't have her attachments with me. I have her statement
42 but not her attachments.

43

44 MR FOX: Could we ask for that? It's item 58 in the
45 tender list.

46

47 THE COMMISSIONER: That's her statement?

1
2 MR FOX: No, it's the attachment 2.
3
4 THE COMMISSIONER: Yes, I don't have the print-out, but we
5 will bring it up on the screen.
6
7 MR FOX: That's right, yes.
8
9 DR WRIGHT: Please go to the document that says "DNA IQ
10 system" --
11
12 THE COMMISSIONER: Do you have a page number for it?
13
14 DR WRIGHT: It doesn't have a page number, but it is
15 attachment 2. It is a very short document. It is just the
16 "FSS" --
17
18 THE COMMISSIONER: Wait until we get it up. What's the
19 heading of it, if we want to search for it?
20
21 DR WRIGHT: "DNA IQ system for Promega". It appears to be
22 the fact sheet, it's dated October 2007. It's a fact sheet
23 that appears to have been given or distributed to the lab
24 about the new DNA IQ method.
25
26 THE COMMISSIONER: Okay.
27
28 DR WRIGHT: Which isn't unusual.
29
30 THE COMMISSIONER: Let's wait. If we get it up first,
31 I think that might be helpful. Is that it?
32
33 DR WRIGHT: No, I think it's before that. It is
34 a statement that she provided on 28 October. I think it is
35 in total probably six pages.
36
37 THE COMMISSIONER: We are not in that document at the
38 moment. Is that it?
39
40 DR WRIGHT: Do you want me to show them the hard copy so
41 they can recognise it?
42
43 THE COMMISSIONER: Sorry, is that the beginning of the
44 document that's up on the screen at the moment?
45
46 DR WRIGHT: No, I think there is about a four- or
47 five-page statement and then there's some attachments.

1
2 MR FOX: It's [LAY.010.025.0001].
3
4 DR WRIGHT: Yes. I think it is either scrolling up or
5 down to get to the fact sheet, but I will come back to that
6 email.
7
8 THE COMMISSIONER: Was it attached to this email?
9
10 DR WRIGHT: I think there are two documents that have this
11 email in it.
12
13 THE COMMISSIONER: This is the attachment 2. So is the
14 document you want following on from this email?
15
16 DR WRIGHT: Yes, I think it is either above or below, but
17 I know there is another attachment with this email in
18 there, but attachment 2 is consistent with what I have.
19
20 THE COMMISSIONER: It is probably the next page, or the
21 previous page. I see; they are all separately loaded. .
22
23 MR RICE: Commissioner, I think I have a page number, if
24 that's helpful.
25
26 THE COMMISSIONER: That would be very helpful.
27
28 MR RICE: It is [LAY.010.024.0002], and I think it's
29 actually part of attachment 1, rather than attachment 2.
30
31 DR WRIGHT: Thank you.
32
33 THE COMMISSIONER: Is that it?
34
35 DR WRIGHT: That's correct. I just want to draw the
36 attention to the figure in the bottom left-hand corner.
37 This appears to be a fact sheet, it's dated October 2007,
38 that was distributed by Ms Ientile to the DNA lab, and that
39 shows in comparison to the Chelex method, the box in the
40 green, the DNA IQ method appears to be working really quite
41 well. I think that's really important to demonstrate,
42 because if I'm a forensic biologist, I'm adopting a new
43 method or I'm going to start reporting on samples that have
44 been generated by a new method, I want confidence that that
45 method is going to work, because when I testify, I need to
46 outline any limitations.
47

1 So this graph appears to be very reassuring to the
2 staff, in terms of, "Hey, our existing method with Chelex,
3 DNA IQ is performing much better." But if we could go back
4 to the email that we had previously, which was attachment
5 2, please, and I only found this a couple of days ago, so
6 I apologise it's not in my statement. This is an email
7 from Dr Hlinka, and it says:

8
9 *Dear Vanessa --*

10
11 THE COMMISSIONER: This is one from Vanessa to Thomas
12 Nurthen, isn't it?

13
14 DR WRIGHT: The top part is but I will read it
15 chronologically.

16
17 THE COMMISSIONER: Okay, thank you.

18
19 DR WRIGHT: Dr Hlinka contacts Ms Ientile on the 24th of
20 the 10th and he says:

21
22 *Thanks for the facts sheet. Am finding it*
23 *slightly misleading in that the yields*
24 *presented in the graph --*

25
26 so the graph that we just observed --

27
28 *for DNA IQ compared to Chelex are actually*
29 *those of the manual method and not the*
30 *automated method. The automated method*
31 *gives yields that are approximately equal*
32 *to that of Chelex or slightly worse.*

33
34 So I can't say for certainty whether Dr Hlinka's correct in
35 terms of whether the wrong information was provided to the
36 staff in that fact sheet or not, but I just thought that
37 was worth raising.

38
39 THE COMMISSIONER: Thank you. I am speculating but I must
40 say when I first saw that graph, I remember that one of the
41 earlier projects, 9 or 11 - I think it was 9 - did a direct
42 comparison with the manual DNA IQ, not the one that was
43 ultimately used, perhaps, but that one, and you'd have to
44 go back and see whether that graph represented the samples
45 from Project 9, which I haven't done.

46
47 DR WRIGHT: Yes.

1
2 THE COMMISSIONER: But also I'm just questioning now, does
3 this also raise - it seems to be that there was an
4 experiment done that hasn't been - you know, one of the
5 examples of an experiment that may have been done but we
6 don't see a - we haven't seen yet, if it exists, a report
7 of it.
8
9 DR WRIGHT: Yes, the concerning part for me is, Dr Hlinka
10 is --
11
12 THE COMMISSIONER: The conclusion is obvious, the
13 conclusion states what it states.
14
15 DR WRIGHT: Yes.
16
17 THE COMMISSIONER: But I don't think we have seen
18 a project report that directly records that experiment.
19
20 DR WRIGHT: Yes, correct. But in the fact sheet, this
21 data appears and Dr --
22
23 THE COMMISSIONER: I understand the point that's being
24 made, and Dr Hlinka is making the point to Mr Nurthen.
25
26 DR WRIGHT: Yes. And the email from Ms Ientile to
27 Mr Nurthen, the same day, it's just that one sentence on
28 the top, "For you to deal with please."
29
30 THE COMMISSIONER: Yes, I see that.
31
32 DR WRIGHT: That was all, thank you, Mr Fox.
33
34 THE COMMISSIONER: Thanks, Dr Wright.
35
36 MR FOX: Thank you, Dr Wright. We move then to the second
37 substantive topic. Professor, can I just ask you to go to
38 your statement, please.
39
40 THE COMMISSIONER: Mr Fox, sorry, before you move on,
41 that, of course, is all in evidence. Do you want to
42 tender that document?
43
44 MR FOX: Sorry, I do want to tender that, yes, thank you,
45 just that one document, thank you.
46
47 THE COMMISSIONER: I accept the document from the news

1 bank extract, the press release. I have no idea at the
2 moment what numbers follow from what we are up to. If you
3 could arrange to have that numbered appropriately or tell
4 everyone, then --

5
6 MR FOX: Yes, we'll deal with that.

7
8 THE COMMISSIONER: -- that's in evidence, thank you.

9
10 **COURIER-MAIL ARTICLE TENDERED (TO BE ADDED TO SCHEDULE)**

11
12 MR FOX: Thank you. So the Professor's report or
13 statement is behind tab 25 of the index.

14
15 Professor, would you mind just turning to
16 paragraph 42. I just want to walk you through the steps
17 that occurred in relation to preparation, which you have
18 described as the "contamination report".

19
20 ADJUNCT PROFESSOR WILSON-WILDE: Yes.

21
22 MR FOX: It will take us a few minutes to do it, but this
23 is to get the flavour of what was actually going on at the
24 time. You indicate at paragraph 42 that there were
25 a number of scientists that were working on various
26 commissions for the first Commission of Inquiry. You're
27 one of the scientists involved in that exercise, and you
28 indicate there that you wanted to assist the Commission of
29 Inquiry as you believed it was beneficial to Queensland,
30 and forensic science more broadly, if its laboratories,
31 methods and procedures were improved to be consistent with
32 the national and international good practice.

33
34 At that time, you were assisting the Commission of
35 Inquiry, you were employed as the director of Forensic
36 Science South Australia, FSSA, and you would usually
37 complete your work for the Commission of Inquiry outside of
38 usual working hours, including over the weekend; do you
39 recall that.

40
41 ADJUNCT PROFESSOR WILSON-WILDE: That's correct.

42
43 MR FOX: You referred to on 16 September 2022 which is
44 when counsel assisting, Ms Hedge, then asked you if you had
45 the capacity to provide a further report. By then you had
46 already assisted by preparing three other reports and at
47 that time you were still completing an Options Paper report

1 and you provide a copy of that email as part of your
2 statement, do you recall?

3
4 ADJUNCT PROFESSOR WILSON-WILDE: I do, yes.

5
6 MR FOX: Then you set out at paragraph 45 the detail of
7 the email that you received and the further information
8 that was given to you and, indeed importantly, instructions
9 that were given, and I'll just take you to those on page 7
10 of your statement.

11
12 In summary, the instructions for the task would be to
13 advise on, firstly, whether the methods, systems and
14 processes in relation to the above two issues were
15 consistent with international best practice when the issue
16 arose.

17
18 Second bullet point: whether the identification,
19 investigation and resolution of the issue was appropriate
20 and consistent with international best practice; and,
21 thirdly, whether the amended method, systems and processes
22 implemented in each case was consistent with international
23 best practice.

24
25 If we look at then what the issue was identified, it
26 was the DNA IQ instrument - this is the top of the page -
27 developed by Promega in around 2008. It was discovered
28 that:

29
30 *The seals from the DNA IQ products*
31 *(consumables) in the extraction phase were*
32 *leading to cross-contamination amongst*
33 *different and unrelated samples.*

34
35 I won't read any further, but the issue, contamination, was
36 what the issue - that was the issue that had been
37 identified for you then to provide responses to the
38 instructions that were given; is that right?

39
40 ADJUNCT PROFESSOR WILSON-WILDE: That's correct.

41
42 MR FOX: Then you identified in paragraph 46 that having
43 identified the issue and the instructions, you then defined
44 that as the contamination issue, which you understood to be
45 the subject of your report; is that right?

46
47 ADJUNCT PROFESSOR WILSON-WILDE: That's correct.

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MR FOX: Then on 21 September 2022, you receive an email from counsel assisting with proposed instructions. You have attached that.

Then between 21 and 23 September 2022, there is a discussion that takes place regarding the due date for the report, because you are overseas in Denmark, chairing a particular committee between dates in late September to early October; do you see that?

ADJUNCT PROFESSOR WILSON-WILDE: Correct.

MR FOX: Then you also chronicle various steps starting on 23 September, this is in paragraph 49. Paragraph 50, on or about 27 September 2022 - I just ask Dr Budowle and Ms Veth just, to the extent you have the statement of the Professor before you, because I know it was hopefully part of the materials that you were briefed with, that if you could just follow this along, otherwise you will hear it. I'm sure it is just reliving the period in the Inquiry when you were engaged as well.

In paragraph 51, on 28 September 2022 you gave evidence in the Commission, primarily on the Options Paper report. You recall that?

ADJUNCT PROFESSOR WILSON-WILDE: I do, yes.

MR FOX: Then on the 29th and 30th until you flew out you believe you were preparing for the meeting that was to be overseas. You recall that?

ADJUNCT PROFESSOR WILSON-WILDE: I do, yes.

MR FOX: Then between about a 10-day period in early October 2022, you chair the meeting in Denmark, and then on 6 October you received further briefing material from the Commission of Inquiry. You recall that?

ADJUNCT PROFESSOR WILSON-WILDE: By looking at my notes, yes.

MR FOX: And you have attached an email. On 12 October you received refined instructions and you have attached those instructions at the annexure LW7, and the deadline for provision of the report was five days later. Do you

1 recall that?

2

3 ADJUNCT PROFESSOR WILSON-WILDE: Yes. I will say that my
4 recollection for all of these is taken from subsequent
5 research, looking through all my emails, et cetera. It
6 wasn't something I did - I naturally recalled. I had to
7 actually go back through my emails to help me recall the
8 sequence of events.

9

10 MR FOX: Thank you. Just so that those who are following
11 this virtually, Dr Budowle and Ms Veth, I'm going to come
12 to you in due course to ask you some questions about your
13 recollection of that particular time period in which you
14 were being given your instructions to prepare reports and
15 attend and the like relating to the first Inquiry.

16

17 Then you were provided with the background, which is
18 set out at paragraph 57 of your statement, and I won't go
19 into any detail about that, you set it out in detail.

20

21 You then receive a statement of Mr McNevin of
22 13 October 2022. That's on the day after that's given,
23 so that's the 14th. Then at about midnight, you say, on
24 17 October 2022, you provided a draft version of the
25 contamination report. You recall that?

26

27 ADJUNCT PROFESSOR WILSON-WILDE: I do, yes.

28

29 MR FOX: Then at about 11 o'clock in the evening on the
30 17th you received some feedback, and then on 18 October at
31 about 4pm you had a virtual meeting with counsel assisting,
32 and possibly others that you can't remember, to discuss the
33 draft report. Do you recall that?

34

35 ADJUNCT PROFESSOR WILSON-WILDE: I do, yes.

36

37 MR FOX: Then in paragraph 64, you refer to a meeting that
38 was held on 18 October 2022 in the evening, 6.30, with
39 counsel assisting providing further material to consider.
40 You recall that?

41

42 ADJUNCT PROFESSOR WILSON-WILDE: From my notes, yes.

43

44 MR FOX: Thank you. And you then indicate on 20 October -
45 this is paragraph 67. Quite early in the morning, there
46 are then some communications. You provide a draft report.
47 Around 10am the next day, counsel assisting provides you

1 with a marked-up version. You then review the marked-up
2 version. You then, at subparagraph (d) - this is on
3 page 10 of your report, or statement - indicate that the
4 changes reflect the things that you had discussed with
5 counsel assisting - you recall that?
6

7 ADJUNCT PROFESSOR WILSON-WILDE: Correct.
8

9 MR FOX: You then refer to some further exchanges by
10 reference to times in subparagraphs (e), (f) and (g), and
11 then (h) in the afternoon, counsel assisting emails you
12 with some further instructions, and then over the page on
13 page 11 of your statement, you attach all the various
14 emails and you provide your contamination report on
15 20 October at about 10.30 in the evening.
16

17 Could I just pause there for a moment? Do you have
18 a recollection - I appreciate I should have taken you to
19 paragraph 77 - that that accurately reflects the amount of
20 material that you say you were provided, in excess of 9,000
21 pages and a suite of 148 documents to review as part of
22 this work on the contamination issue?
23

24 ADJUNCT PROFESSOR WILSON-WILDE: I have kept records of
25 all of the documentation that I received over that time
26 period, and all of the emails that I had. To be honest, if
27 you asked me about my recollection, I have some
28 recollection, but a lot of it is blurred and I've had to
29 rely heavily on my emails and notes and documentation.
30

31 MR FOX: Thank you.
32

33 Now, Dr Budowle, can I start with you. You're
34 familiar with what I've just rather quickly taken the
35 Professor through to refresh her memory of the evidence
36 that she gave just a few days ago and to briefly outline
37 it. You are familiar with what the Professor has indicated
38 from what I've just taken you to about the preparation of
39 the contamination report. Do you have any observations to
40 make about the way in which - and this is not intended to
41 be disrespectful of the first Inquiry, no doubt it was an
42 intense affair entirely, but do you have any comments to
43 make about that particular period of the Inquiry, because
44 this is where both you, Ms Veth and also
45 Professor Wilson-Wilde and Dr Wright were all giving and
46 preparing reports - would you like to just make your
47 comments in relation to that time period and what you were

1 experiencing yourself in terms of preparing reports?

2

3 DR BUDOWLE: It may not be much different than what
4 Dr Wilson-Wilde has presented. In fact, I was asked in the
5 two-week period of September to prepare three reports
6 looking through a lot of documents in a very short time
7 frame. The constraints, of course, were the documents that
8 the lawyers thought were important, based on their
9 investigation, so we only worked with what was given, and
10 there was, you know, constant - I say - requests to get it
11 done early, for the three reports.

12

13 The fourth one I think was the really challenging one
14 that took longer to complete through November and that
15 Johanna Veth took the lead on and I contributed, where
16 there was - I don't know if there were - I didn't count
17 9,000 pages, but it could be that or more, the same kind of
18 thing, where we had to dig deep into data to see if we
19 could find some things of value.

20

21 So my expectation is we identified some of the issues
22 that may have been in those documents and we probably
23 missed some of the issues in there just because of the time
24 constraints, and there may be more things lurking than just
25 Project 13, if we dug deeper.

26

27 MR FOX: Thank you. Ms Veth, do you have any remarks you
28 would like to make, too, about what you experienced at that
29 time period in terms of responding to instructions that had
30 been given to you to prepare a report?

31

32 MS VETH: Yes. The Professor used the word "intense" and
33 that characterises that period of time quite well. For me
34 personally, it was the - probably the last month leading up
35 to the hearings. I mean, I was fortunate in that the
36 module that I was appearing in was actually the last - or
37 the sixth module, and so I had had a reasonable amount of
38 time to review the documents that we had. I did a quick
39 count at some point, and we had received over 1,000
40 documents for the areas that Dr Budowle and I were working
41 on together, and one of those documents was more than 2,000
42 pages long. So - and also, we were dealing with a lot of
43 spreadsheets, and it's very hard to make sense of someone
44 else's spreadsheets 10 years later. You know, I'm also
45 open to the possibility that things were misinterpreted by
46 ourselves, simply because we were working with other
47 people's spreadsheets or other people's minutes of

1 meetings, and if the question is did we miss anything,
2 I think that's entirely possible, just from a sheer volume
3 of work that we did have to - or documents that we did have
4 to review.

5
6 MR FOX: And Dr Budowle, did you have any understanding of
7 what other experts were concentrating on, and if I may be
8 more direct in that question, did you have an understanding
9 at that time that Professor Wilson-Wilde was actually
10 focusing on the contamination point?

11
12 DR BUDOWLE: I probably don't recall well now, because
13 sometimes we didn't know what others were working on until
14 a report was provided. So, you know, I remember more,
15 like, this swab issue or something or the alcohol on the
16 swab. I had no idea anybody was doing anything on that
17 until I saw her report. So sometimes we were told some
18 people were working on areas and sometimes we were not.
19 But not a lot of detail. I got the feeling that they
20 tended to want us to be more isolated to get our opinions
21 less biased from others.

22
23 MR FOX: Thank you. Ms Veth, do you have a similar
24 understanding as Dr Budowle - that is, that you did not
25 have a clear understanding of a dividing line between
26 yourself and any other experts who were engaged by the
27 Commission?

28
29 MS VETH: That's correct. It was not until I was asked to
30 either review - on an occasion I was asked to review
31 a report that another expert had created, including the
32 swab report that Professor Wilson-Wilde prepared, because
33 it was - because it may have been pertinent to the work
34 that I was specifically dealing in, but otherwise, I wasn't
35 really aware of who was doing what.

36
37 MR FOX: Thank you. And Dr Wright, you were also engaged
38 at this period to provide reports to the Commission. Do
39 you have a similar recollection of the intensity of that
40 particular period of time?

41
42 DR WRIGHT: Yes, I wasn't engaged as an independent
43 expert. The Commissioner engaged me to specifically review
44 the Blackburn DNA case file and any associated documents,
45 so it was quite broad. I wasn't given, kind of, you know,
46 the specific terms of reference potentially as the others
47 had, so as Ms Veth said, it was, you know, quite isolated,

1 I didn't have an opportunity to speak to any other experts
2 I think until a week or two before we were meant to
3 testify, but as Ms Veth said, you would get some documents
4 and then you would probably have to request some more
5 documents, because you didn't know what you were looking
6 for. It was very open, "Okay, find something within the
7 Blackburn case that could indicate something would go
8 wrong". So you really had to look at everything from A to
9 Z and then back again, and then "Oh, okay, I missed this,
10 now I've got this other document, now this makes sense".
11 But it definitely was a very, very intense period. I was
12 working full time and doing this evenings, weekends and so
13 forth, so it was, yes, a very intense period.

14
15 MR FOX: For convenience, I was going to move to the final
16 topic. That's just in relation to FSQ, or Forensic Science
17 Queensland. Professor, you have indicated at
18 paragraph 165, just a few paragraphs there, under your
19 heading "Moving forward" in terms of what steps have been
20 taken, or have taken place. What I wish to just invite you
21 to inform the Commission of is that since your appointment,
22 are you able to just provide a general summary of the main
23 steps and actions that have taken place in terms of seeking
24 to implement the recommendations from the Sofronoff
25 Inquiry?

26
27 ADJUNCT PROFESSOR WILSON-WILDE: Absolutely. It would be
28 my pleasure. When I arrived at the laboratory in January,
29 probably my first task was to have a look at the processes
30 that they were doing currently and try to get my head
31 around how the processes were occurring. My primary focus
32 was the current methods and the results going out of the
33 door, because we had imminent trials, and so it really was
34 ensuring, and has been ensuring, that those results are fit
35 for purpose.

36
37 One of the first things I identified was that the DNA
38 interpretation process wasn't consistent with what would be
39 utilised in other laboratories around the country, and
40 there was a requirement to realign the way that the
41 laboratory interpreted profiles. And some of that you can
42 see from the first Commission of Inquiry with the no DNA
43 detected, DNA insufficient for further processing, and an
44 over reliance on complex mixtures as a result, so the
45 mixture results being determined too complex to interpret.

46
47 So working with the scientists and independent

1 experts, I brought independent experts in from overseas to
2 conduct training programs, et cetera, and bringing on a new
3 manager of biology, again, working with staff to develop
4 new guidelines for DNA interpretation. I think that was
5 a really significant outcome, because what that meant is we
6 were realigning those results, and actually then generating
7 a significant number of additional results and information
8 for the police and for the courts.

9
10 I have been looking at all of the recommendations,
11 reviewing them all, adapting a plan to implement them,
12 assign them, categorise them, prioritise them, et cetera.

13
14 I've also had to build the institute or the agency
15 itself, so it's extensive recruitment processes,
16 establishing a leadership team, but then also ensuring that
17 we have proper leadership development, so putting in a
18 leadership development program.

19
20 At the same time, going to government and seeking
21 additional funding, which we were successful in gaining.
22 What else? Also, building on all of the information that
23 I had got from the Commission of Inquiry, plus also
24 discussions with scientists, and there were lots of
25 discussions with scientists, around what they saw the
26 issues as. Validation was a particular issue that
27 I identified in terms of the way the laboratory conducted
28 its validation programs, and so doing a review of all of
29 the validation that we have, and we're still going on with
30 all of that, but again, through a prioritised process,
31 ensuring that we have appropriate validation documents for
32 all of our methods.

33
34 But also what I wanted to do is, the Commission of
35 Inquiry has recommended 123 recommendations, but it would -
36 as Dr Budowle and Jo Veth have indicated, the potential is
37 things are missed. So I felt it was really important to do
38 a deep dive into the processes. So what I did was get
39 independent experts to come and do a deep dive into - and
40 so far we've done the evidence recovery area and we've done
41 the DNA analysis area - to actually go through validation
42 documents, current methods, making sure people have the
43 skills and experience; that the training is in place,
44 although I do want to do a separate review of that as well;
45 the facilities - and really just go through and deep dive
46 into each of those areas.

47

1 In addition, part of FSQ encompasses chemistry, so we
2 can't ignore that area. You lift the lid over any process
3 and you'll find opportunities for improvement. So we've
4 also commenced deep dives of that process.
5

6 As part of the leadership team I've been able to
7 recruit an excellent manager of innovation and an excellent
8 manager of quality as well, and so really establishing that
9 leadership team and having them work together is really
10 important.
11

12 Now, the work that we've been doing in the innovation
13 space is really important because we've established
14 a proper project approval process, so that there is
15 a project approval, and really key to that is an empirical
16 study design matrix that actually documents and develops
17 a matrix of all of the experiments, right down to the
18 detail of number of replicates, the - what you are testing,
19 et cetera. And so I can see, then, you can see really
20 clearly that there is no - they are testing a variable at
21 a time, and really importantly that the data is inferring
22 what results should come.
23

24 Those project approval processes are signed off by an
25 independent interstate expert as well as the management
26 team, and that all occurs before the project commences.
27 Once the project is completed, a report is done. That
28 report goes through our management team and then again goes
29 out to an independent expert, and then comes back in before
30 it's approved and before it's implemented. And appropriate
31 methods and training are conducted before that occurs as
32 well.
33

34 So that's all going. And we've put in a process to
35 manage and have visibility over all projects that we're
36 currently doing in the innovation space.
37

38 Then, in the quality space, we are completely redoing
39 the quality manual, the quality system, and that's
40 a complete overhaul of that process, and both of those
41 teams are recruiting scientists to sit within them.
42

43 Then, in terms of our bag logs, we've been looking at
44 ways to address those that don't - so we still have
45 quality, but that's a large-scale recruitment process,
46 outsourcing, and a number of other things that have been
47 announced, so that we can really build a good, viable

1 service to the courts and the judicial system.

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I have also been working on our stakeholder engagement with the Queensland Police Service, the Office of the Director of Public Prosecutions and the courts and having meetings with representatives from those, so that we can really work together and try and get the best results.

We've also implemented an interim report format, and we've instigated a number of recommendations and we've delivered quite a number. But this really is rebuilding the agency from the ground up, whilst also delivering the service.

In terms of the historical case review, we've set up a process for that, which is a legal-led case review, and so that --

THE COMMISSIONER: What, sorry?

ADJUNCT PROFESSOR WILSON-WILDE: Legal-led. There is no point in the lab utilising resources to review a case that has been through the courts or was tried and DNA wasn't a major factor, even if there may be a little bit of evidence there. So the idea is that the DPP and police would review the case to see if any further DNA evidence would be probative for the case and therefore those are the ones that we would prioritise, obviously looking at the most serious cases as part of that review.

So that process has been approved and now we're building a team that will then really go back and really look through all those cases in earnest. So that process, whilst we have commenced it for certain cases, it hasn't kicked off in its full review because we're still recruiting scientists into the laboratory.

Unfortunately, that process has been found to be more difficult than we first anticipated. Forensic biologists who are fully qualified are not - are somewhat rare, and so we've had some - whilst we have been able to attract a number of excellent scientists, we're still short of the number that we need to deliver what we need to deliver, and we're still working through that process.

MR FOX: Can I just ask you, when you are talking about the review processes, at 167.1 of your statement, you

1 indicate there about a further improvement to FSQ would be
2 to review all cases, not just limited to those identified
3 from the review of the extraction positive control from
4 2007 to 2016. Just provide some background as to what you
5 have described there in terms of the review process?
6

7 ADJUNCT PROFESSOR WILSON-WILDE: So the idea will be
8 recommendation 105 requires us to go back and have a look
9 at the positive controls for the MultiPROBE. In doing
10 that, we will do that process, we've got an idea about how
11 we will do that, and we're currently recruiting a scientist
12 in order to perform that work. Once that occurs, we will
13 go through, identify those, but when we identify them, they
14 will then go into the legal-led review process. So that's
15 what we're thinking there.
16

17 THE COMMISSIONER: Just to clarify, the intention is to go
18 back to 2007.
19

20 ADJUNCT PROFESSOR WILSON-WILDE: It is, yes.
21

22 MR FOX: Unless there is anything you wanted to say,
23 I just wanted to ask Dr Budowle, you have heard what the
24 Professor has indicated about the steps that have been
25 taken, and I appreciate it may be the first time that you
26 have heard some detail around that, but what you have heard
27 the Professor say, are those all the things that you would
28 expect to have occurred following the recommendations being
29 handed down by the first Inquiry, or are there any things
30 that you would wish to add to the shopping list that the
31 Professor has indicated?
32

33 DR BUDOWLE: I think they are commensurate with the
34 recommendations. It's a herculean effort, it's much harder
35 to rebuild a lab that has a culture issue and a quality
36 issue than to start a lab from scratch, or to take over
37 a lab that is functioning well, obviously, so she has
38 a real challenge and many of the things she has outlined
39 I think are spot on.
40

41 The only difference that we would do, in our system,
42 when we have an issue is - and I don't think it is the
43 same, but I could be wrong - we do a materiality review,
44 which usually isn't the police or the lab, but the lawyers
45 that are involved, to see if any cases may have been
46 impacted, particularly those that are convictions, in that
47 if the evidence had been - if there had been more evidence,

1 it might have pointed in another direction. They would
2 reach out to the convicted individuals to see if they want
3 to proceed forward and also prioritise those cases, but
4 other than that, I think that's a good start, but I'm sure
5 there will be more things added as she goes along.

6
7 THE COMMISSIONER: Thank you. And Ms Veth, would you like
8 to indicate your comments in response to what you have
9 heard from the Professor?

10
11 MS VETH: In my opinion - I mean, this is an enormous task
12 and, frankly, I'm surprised at what she has already been
13 able to accomplish so far. So, I mean, other than to wish
14 her well, because I imagine there are going to be further
15 challenges ahead, those projects that she has identified
16 seem appropriate, given what came out of the Commission.

17
18 MR FOX: Thank you. And, Professor, just one thing that
19 came from Dr Budowle, which was you used the phrase
20 legal-led review and he talked about materiality. Is there
21 anything you would like to say in response to that?

22
23 ADJUNCT PROFESSOR WILSON-WILDE: I should also add,
24 thank you, that defence are engaged as part of that
25 legal-led review, and I should also add I haven't actually
26 mentioned all of the cultural changes that I have also
27 instigated at the laboratory to bring the scientists along
28 on the journey; bring chemistry, biology together;
29 re-instigated the social club; I've hired a director of
30 wellbeing and culture, a clinical psychologist to help
31 everyone; career success plans have been put in;
32 a strategic plan has been developed. A values statement
33 has been developed along with staff that got excellent
34 staff buy-in. Oh, gosh.

35
36 THE COMMISSIONER: You don't have to give me a shopping
37 list of absolutely everything you have done.

38
39 MR FOX: Finally, Dr Wright, you have heard from
40 Professor Wilson-Wilde and your other two colleagues, there
41 is an opportunity for you to venture any comments you want
42 to make.

43
44 DR WRIGHT: I think the recommendations that the first
45 Commission of Inquiry made were exceptional, they were very
46 extensive, but as we have heard, there are going to be more
47 issues found. So as we all agree, it is an absolutely

1 enormous amount of work and I think it is going to take
2 many, many years to do the technical side of it, but also
3 the cultural side of it as well. So this isn't something
4 that's going to take two or three years, I think it's going
5 to take many, many years and there's going to be competing
6 priorities as well.

7
8 MR FOX: Thank you. Just finally, Dr Wright, in relation
9 to Project 70, there was that appendix issue. If you
10 haven't had a chance to look at that, I think the
11 Commissioner would accept a short document, if you wanted
12 to produce it, in reflecting on --

13
14 THE COMMISSIONER: Or anybody.

15
16 MR FOX: Or anybody, yes.

17
18 THE COMMISSIONER: Not anybody, this is not an
19 invitation to any member of the public.

20
21 MR FOX: No.

22
23 THE COMMISSIONER: If any of the four experts wished to
24 add something or cast a light on what seemed to be the
25 ambiguities or the lack of clarity in Project 70, that
26 would be very helpful.

27
28 MR FOX: Thank you. Now, I don't know whether any of the
29 other legal representatives wanted to try to contribute at
30 this particular point.

31
32 THE COMMISSIONER: Have you basically concluded at this
33 stage?

34
35 MR FOX: I have concluded, yes.

36
37 THE COMMISSIONER: With this particular --

38
39 MR FOX: I have no further questions.

40
41 THE COMMISSIONER: I'm going to ask now if any of the
42 other legal representatives have any desire to ask any
43 questions.

44
45 MR RICE: No, thank you, Commissioner.

46
47 MR HOLT: No, thank you, Commissioner.

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MR DIEHM: I will, Commissioner, on one topic in particular, if I may.

THE COMMISSIONER: I just wanted to get the lay of the land. So no-one else is putting their hands up at this stage, other than Mr Diehm. You will get another chance after he finishes, just in case.

MR DIEHM: Commissioner, it concerns the topic of formal case reviews, and in paragraph 28 of Adjunct Professor Wilson-Wilde's statement if I may have that brought up on the screen. [LAY.010.020.0001]

THE COMMISSIONER: The first one, I assume? That's the paragraph you are interested in?

MR DIEHM: Yes, paragraph 28. I'm trusting that the experts online have that in front of them as well? May I just clarify?

DR BUDOWLE: Yes.

MS VETH: Yes, I do.

THE COMMISSIONER: They should be part of the screen-share, I assume.

MR DIEHM: Thank you. I will ask, firstly, of you, Dr Wilson-Wilde, concerning the method employed in those various steps that you describe in paragraph 28 there, in the conduct of an historical case review, given that's being done in the present day, in the lab, the Commission may take it, no doubt, that that is employing the current technology in the treatment of those various substances that are being subjected to that analysis?

ADJUNCT PROFESSOR WILSON-WILDE: It is; that's correct.

MR DIEHM: So you have offered that up as being the method, or the process being employed in the lab now, in the conduct of the formal case reviews, and I just wanted to ask each of the experts in turn as to whether they consider that process as, in itself, being appropriate, or whether they have any other suggestions as to anything else that might be done in the conduct of those historical case reviews.

1
2 Perhaps if I might start with you, Ms Veth?
3

4 MS VETH: I imagine that the decision around what type of
5 retesting will be done will be based on case by case, and
6 may well include turning to other laboratories who offer
7 specialist techniques, if the case warrants it.
8

9 I believe there was a separate section further down at
10 paragraph 31 that talks about samples possibly affected
11 by - well, samples that were processed on the MultiPROBE
12 platform, that the retesting for these will likely be on
13 the original exhibit, where possible. So I suspect that
14 this - these paragraphs summarise the process without
15 giving specific details of the exact nature of the
16 retesting, because that would depend on the case and the
17 samples.
18

19 MR DIEHM: Yes. And in your view, that should be
20 scientist-driven?
21

22 MS VETH: Well, once it has been determined that a case
23 should be re-looked at, I appreciate this legal-led review
24 process makes sense, so once it has been deemed that a case
25 should be reconsidered for further testing, then the nature
26 of that testing should be scientist-led.
27

28 MR DIEHM: Thank you. That is what I meant to be asking
29 you about, and I appreciate the clarification.
30

31 Dr Budowle, do you have a response to my question,
32 framed as it was?
33

34 DR BUDOWLE: It would be very similar to Ms Veth's
35 response, but just - I'm assuming that these are summaries
36 of the more in-depth analyses that would be undertaken, and
37 we would want to see, as I said, a materiality review,
38 which I think is what is meant by the prosecution and
39 defence perspectives. Then, from there, deciding which
40 cases warrant further analysis, because we have to be
41 practical, we have to be resource-driven as well, to the
42 cases that are relevant and where probative evidence could
43 have an impact. And then triaging based on the amount of
44 DNA one has, again, as Ms Veth said, the type of case, what
45 markers may be of value, and then make decisions
46 accordingly - that part would obviously be scientific. The
47 first part would be probably less for the scientist and

1 more of the legal side or the judicial side of things.

2

3 MR DIEHM: Thank you. And Dr Wright?

4

5 DR WRIGHT: Yes, so each recommendation or issue that was
6 identified by the Commission of Inquiry and any further
7 issues that have been identified, you really have to
8 scientifically understand what has gone wrong at
9 a molecular level to understand which treatment you choose.
10 Without that understanding of what has happened to that
11 sample at a molecular level, if you apply the wrong test,
12 you may get a failed outcome but you won't know that it's
13 a failed result, you will just think, "Well, there was no
14 DNA in that sample." So I'll refine that to recommendation
15 105 and everything that we've learnt about it at this
16 Commission of Inquiry with the DNA extraction, you know,
17 I think everybody agrees that going back to the original
18 extract is not a good idea, and that's what's been
19 reflected here.

20

21 THE COMMISSIONER: And I think Dr Wilson-Wilde just said
22 it would be using current methodology, not old
23 methodologies.

24

25 DR WRIGHT: Yes, and that's where I think there probably
26 needs to be some additional consideration. Going back to
27 the original swab and applying standard DNA extraction
28 processes may not be able to release any residual cells
29 from that swab. So I've done some further technical review
30 of this, and some of it arose out of your work and
31 Dr Budowle's work at the original Inquiry with the rayon
32 swabs that were retaining cells, so they were very good
33 at - the crime scene swabs that the police were using were
34 very good at recovering the cells from the crime scene but
35 there has been a lot of literature, particularly medical
36 literature, which shows that once they are trapped in that
37 tight weave of that rayon, in one study it showed up to
38 80 per cent of cells were trapped in that weave. So it
39 goes through a standard extraction process and maybe only
40 20 per cent of those cells are released from the rayon
41 swab.

42

43 THE COMMISSIONER: Is that encompassed by the - I mean,
44 without going into each and every potential example that
45 one could think of of the different sorts, I think there
46 was a consensus amongst all of you that the decision has to
47 be sample-driven and scientist-driven to understand - and

1 materiality, and those questions of materiality can extend,
2 I would have thought, beyond just legal materiality but
3 also to an assessment of the materiality of the swab and
4 the extraction procedure that is going to be applied. But
5 they are individual decisions made for individual samples,
6 aren't they?

7
8 DR WRIGHT: Yes. My point is that a majority of the
9 samples will be swabs that are submitted to a forensic
10 laboratory, so I think you are going to get a problem
11 where, if you try to apply that rayon swab to a standard
12 extraction procedure, you may not actually release the --

13
14 THE COMMISSIONER: I understand that, but having
15 understood that, isn't that an example of sample-driven
16 decision-making?

17
18 DR WRIGHT: Yes, correct, but the variation of what I see
19 here is the suggestion is put those samples from
20 recommendation 105 through the standard extraction process,
21 and I don't believe that that will work. I believe there
22 has to be - and there has been some research done where
23 labs are looking at what they can do to have a targeted
24 method to try to release those cells from the swabs, and
25 there's some research showing that labs using this very
26 particular method are recovering three times as many cells.

27
28 So my point is just putting those swabs through
29 a standard extraction method I don't believe that you will
30 be able to release those swabs. I believe there has to be
31 research done in conjunction with existing research and
32 applying a method that will ensure those cells are released
33 from the rayon swab.

34
35 THE COMMISSIONER: Dr Wilson-Wilde, do you want to respond
36 to that?

37
38 ADJUNCT PROFESSOR WILSON-WILDE: I think I agree that you
39 need to validate a method that is the optimal method for
40 the substrate and the biological material that you are
41 dealing with. I don't understand what a difference of the
42 original extraction process might be, but if you have
43 a rayon that you - is purported to have blood on it, then
44 you have - you should have the best method possible for
45 rayon with blood on it, and that should be the method that
46 you apply to all of your rayon and blood samples. And so
47 the idea is that we would have specific workflows that are

1 aligned to the substrate and biological material to
2 maximise DNA recovery.

3
4 THE COMMISSIONER: Can you just help me with one thing,
5 I think Dr Wright mentioned that further research is taking
6 place in some of these areas, and some laboratories might
7 have developed expertise a particular or published to
8 indicate expertise in a particular area. Do you have any
9 processes in place to keep track of developments in other
10 laboratories that would maybe assist in finding out what
11 technique is applicable to a particular area?

12
13 ADJUNCT PROFESSOR WILSON-WILDE: A key arm of what we're
14 doing is establishing an innovation team, led by a manager
15 innovation, and that team will be responsible for engaging
16 with universities, academia, and having a really good
17 relationship with other laboratories, keeping an eye on
18 research.

19
20 A really good way to ensure you've got a strong
21 research culture is actually to do research and have strong
22 partnerships with academic institutions, so that is the
23 process that we are looking at putting in, and empowering
24 staff to have good networks and good relationships with
25 other labs as well, and I have sent one scientist to
26 another lab to go and learn from that other lab and bring
27 the learnings back and have - run a presentation,
28 et cetera, to share those learnings with their colleagues.

29
30 THE COMMISSIONER: I'm sorry to interrupt, but you also
31 mentioned earlier that - I think you mentioned earlier -
32 that there were times when you sent samples off to other
33 laboratories.

34
35 ADJUNCT PROFESSOR WILSON-WILDE: That's correct.

36
37 THE COMMISSIONER: If you knew that there was a laboratory
38 that had specialised expertise in a particular area and you
39 had a sample that was difficult to treat or from which to
40 extract DNA, would you - I mean, what determines when you
41 use another laboratory to assist you?

42
43 ADJUNCT PROFESSOR WILSON-WILDE: We currently don't have
44 a Y-STR system in place. The Y-STR is for the --

45
46 THE COMMISSIONER: That's chromosome Y?
47

1 ADJUNCT PROFESSOR WILSON-WILDE: Yes, male DNA. We're in
2 the process of validating that method at the moment, it's
3 one of the recommendations, but we probably won't have that
4 method online until the new year, and so in the interim, we
5 are outsourcing that to another laboratory, so that the
6 casework isn't - is still maximised, the evidence that
7 we're getting where that's appropriate. And that's
8 a decision that the scientists make in conjunction with the
9 Queensland Police Service, and we get bone analysis from
10 the AFP at the moment, but if we needed mitochondrial DNA
11 analysis, there's a number of laboratories that we can go
12 to.

13
14 The manager of biology sits on the specialist advisory
15 group, which is a national group for biology, and so they
16 are making those networks and knowing what all the labs are
17 doing. We also have strong connections with overseas
18 laboratories and we're also making sure we've got a good
19 cohort of scientists going to conferences and things, and
20 that's where they can really learn about what some of that
21 latest research is.

22
23 MR DIEHM: Thank you, Commissioner, that's all I had.

24
25 THE COMMISSIONER: Does anybody have any other questions,
26 first, before we go back to the experts? Does anyone have
27 any questions in relation to any of the matters then this
28 morning?

29
30 I think, just to close off, Mr Fox, did you want to
31 ask if any of the experts had anything in particular that
32 they wished to add or comment on?

33
34 MR FOX: Yes, certainly.

35
36 THE COMMISSIONER: Just in case, while we have them here.

37
38 MR FOX: Certainly. Thank you for your time this morning
39 and indeed, probably the afternoon. Just in relation to all
40 the various topics that we've covered during the course of
41 the session, if there is anything further, and indeed maybe
42 it's just in relation to that last exchange, but anything
43 further that any of you would wish to venture, this is the
44 opportunity to do so.

45
46 DR WRIGHT: No, thank you.

47

1 THE COMMISSIONER: Ms Veth?

2

3 MS VETH: Yes, just one thing that arose in the evidence
4 yesterday. A question was asked of the witnesses, did
5 anyone say anything after the implementation of the
6 MultiPROBE; did anyone notice if there was a problem with
7 the results? And, sorry, I can't find it in the
8 transcript, but I recall that the answer - there was sort
9 of a shrugging of shoulders and nobody could recall anyone
10 making any comments about the results that were coming off
11 the MultiPROBE, and I just wanted to raise that in our
12 examination of the Blackburn case, that's probably because
13 nobody was really looking. For example, in the Blackburn
14 case, there were several bloodstains that produced really
15 low or poor results, and there was nothing ever done about
16 it. There was no interrogation of those results. There
17 was no, "Mmm, that's strange. Why are we getting such poor
18 results from these bloodstains?" It was partly to do with
19 the way that cases were being processed and managed, but
20 I just want to raise this, because this is an important
21 question, that this piece of equipment was implemented on
22 pretty shaky data, and there seemed to be no formal review
23 of the results, and I don't think that the reporting
24 scientists would - either could or were in a position to
25 actually interrogate the results that were coming off the
26 platform. So I just wanted to raise that as an issue.

27

28 THE COMMISSIONER: Thank you very much. I'm going to come
29 back and ask Dr Wilson-Wilde one more question in relation
30 to that.

31

32 Dr Budowle, do you have anything further that you
33 wished to add?

34

35 DR BUDOWLE: Maybe two things. One is that
36 Dr Wilson-Wilde raised something earlier that reminded me.
37 I think one of the issues that hasn't been addressed well
38 is communication amongst the scientists and the management,
39 but also in communication of the language that was used.
40 When I read some of these reports, I find the words that
41 are used are not necessarily the appropriate words .

42

43 For example, in report 13, I remember one of the
44 tables had "DNA profile". Well, "profile", to me, means
45 something with peaks and alleles and something that we
46 interpret of the genetic signature, yet it was applied to
47 the quantity of DNA recovered, and so these - the language

1 used can be quite confusing, and that could be an
2 impediment. So I would stress to develop a working lexicon
3 that could be used. We saw that earlier with that "no DNA
4 detected" and all these things. But just in Project 13,
5 there was some of this misuse of language, or loose use of
6 language, that could contribute to confusion.

7
8 The other point within the last exchange is, I'm
9 a strong advocate of innovation, I spent a lot of my career
10 doing that, and I also want to say, you have to be careful
11 about being deluded with new science. Just because
12 something is being reported as being the best thing since
13 sliced bread, if you use those terms in Australia.

14
15 THE COMMISSIONER: We do.

16
17 DR BUDOWLE: Okay, or any kind of bread for that matter,
18 it's just - it doesn't mean that it necessarily translates
19 from what one lab researcher found is going to go into
20 operation, and you have choices: you either should be
21 working with what you have that you know is tried and true,
22 or place the sample on hold and do nothing until something
23 better is well established. So not just grabbing
24 a technique and starting to use it, because the lab next
25 door has some good results or someone at one of the
26 universities found this at a meeting. It still has to go
27 through the proper vetting, testing and assurance before
28 you make a decision to, again, consume very precious
29 evidence.

30
31 THE COMMISSIONER: Thank you very much.

32
33 Going back to Dr Wilson-Wilde, you heard those
34 comments, bearing in mind that this is not - my terms of
35 reference are really to look at - sorry, the relevance of
36 a lot of this to this Inquiry is not that we're doing
37 a whole general examination of everything but really it's
38 to see, to look into the question of the implementation of
39 recommendation 105 or the ability to implement any other
40 recommendation or sub-recommendation that may come out of
41 this Inquiry. And I'm not foreshadowing anything at this
42 stage, but it's really - I think we've dealt for my
43 purposes, unless you want to add - well, anyone can add
44 anything. These comments that are now being made are
45 relevant at this stage, as I see it, to the current
46 practices in the laboratory and the way - you know, the
47 matters that you have been describing, that you are dealing

1 with, that would lead to a confidence in the way in which
2 the recommendation is implemented.

3
4 The particular matters, in particular, I think that
5 have been raised, you know, questions of being able to ask
6 questions, of results, communication between people,
7 appropriate use of terminology, which - it's not because
8 it's just pedantic, I don't think Dr Budowle is suggesting
9 a pedantic use of incorrect grammar; rather, it's the fact
10 that if you use the wrong technical term for the wrong
11 thing, that it is misleading and it can be misleading, and
12 we've seen examples, in fact, even in the documents we've
13 looked at today, of what may well be imprecise use of
14 language - manual versus automated, partially automated,
15 partially manual, matters such as that.

16
17 In that context and listening to those observations,
18 can you respond in terms of today's practice in the
19 laboratory or existing and, you know, immediately planned
20 or whatever, just to respond to those matters?

21
22 ADJUNCT PROFESSOR WILSON-WILDE: Absolutely, thank you.
23 The manager innovation is currently developing an SOP for
24 validation addressing a lot of those concerns around
25 standardised formats, ensuring what should be in it, what
26 should the considerations be, and after this I will have
27 a conversation to ensure that has maybe some of the
28 terminology in it as well, if that's not already being
29 planned to be put into it. So I think that's a really
30 important outcome.

31
32 The other thing around communication - we have
33 established a number of additional communication
34 mechanisms. I appreciate that not one communication
35 mechanism works for all, so we have introduced
36 a fortnightly newsletter and we talk about research and all
37 sorts of things in there, it's all the news of what might
38 be occurring. I've also instigated a CEO drop-in session,
39 when any staff member in the morning can come and raise
40 issues directly with me, and so that sort of gets around if
41 there is anything that they want to talk about that is
42 sensitive, they can.

43
44 The manager quality is establishing a quality forum.
45 That's to meet some of the recommendations but particularly
46 around raising issues and things like quality issues in a
47 safe forum.

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We have discussed introducing seminars and we have had a couple of seminars occur, and we've introduced all-staff meetings as well, and we do get scientists to talk about research in there as well. But it's essentially multiple forums that people can raise issues and --

THE COMMISSIONER: That's one of the main issues I think that has been raised, and I think there were two things that have come out of the comments that have just been made - not just two, you have answered some of them.

I think importantly, in terms of lessons learned, the two issues that - well, two that lead to a third, are the notion of taking responsibility, which is part of the questioning and communication procedure, and one could put that into the broad sense, too, of assurance. So just directly, apart from talking generally about seminars and matters such as that, and you talked about cultural change, can you tell me what - do you have and on what basis do you have, if you do, a level of confidence that the scientists now would feel free to question and take responsibility for error?

ADJUNCT PROFESSOR WILSON-WILDE: I think there are two parts to that, thank you.

THE COMMISSIONER: Obviously.

ADJUNCT PROFESSOR WILSON-WILDE: The cultural change is a long one. It's not one that I think's going to change overnight. Certainly in raising issues, I am confident that they can, absolutely, and I invite you to ask members of the staff directly if you have any concerns regarding that.

I think the responsibility component is a little bit harder, because that takes the onus on the individual, and we're talking about years of a culture where people didn't want to raise issues because they were afraid of the repercussions, and there's almost a risk overlay that I kind of feel that people don't want to take the risk of coming forward, and so I have to do walk-arounds and actually talk to people to find out things or to find out if people are having problems or there's something that is blocking them achieving, and I do think that's a longer journey for the staff. I'm confident we'll get there.

1 I don't believe we've got it quite right yet, because it's
2 too soon, but I think we're establishing an environment
3 where that will occur.

4

5 THE COMMISSIONER: I have nothing further. Do you have
6 anything further?

7

8 MR FOX: No, thank you.

9

10 THE COMMISSIONER: No-one else is putting their hand up.
11 I'm looking at the screen, I'm looking at those physically
12 present here.

13

14 I think, then, that that concludes this session of
15 concurrent expert evidence.

16

17 MR FOX: Yes.

18

19 THE COMMISSIONER: What now?

20

21 MR FOX: I think we adjourn for the day, or we will rise
22 for the day, and then tomorrow morning, the two witnesses
23 are separately, Professor Wilson-Wilde and Dr Wright.

24

25 THE COMMISSIONER: Okay. Thank you.

26

27 MR FOX: As presently envisaged.

28

29 THE COMMISSIONER: As presently envisaged. Thank you.

30

31 Look, I really do wish to thank each of you for being
32 present today and giving us the benefit of your opinion.
33 I'm not certain that we've been as difficult for you as the
34 previous Inquiry, in terms of volume of material and the
35 depth of the many, many varied reports we have asked for,
36 but at the same time, I do appreciate we have put you under
37 time pressure, and that's because the whole of this Inquiry
38 is pressured as to time, and I'm really appreciative of the
39 generosity and the breadth of your response both in time
40 and attendance.

41

42 So a special thanks, of course, to Dr Budowle, because
43 he has the added difficulty of, I think, a recent return
44 home, which probably gives rise to some jetlag issues and,
45 in addition to that, a big time difference, so we do
46 appreciate the fact that you have made that extra effort.

47

1 New Zealand's not quite as big a difference in time
2 frame, but I understand that each of you have given up your
3 working time and your personal time to help this Commission
4 of Inquiry, and for that I am very, very grateful, and
5 I know - I'll just add to that.

6
7 I know, Dr Wilson-Wilde, you have put a lot of effort
8 into it as well, but I know Dr Wright has also put an
9 enormous amount of effort into the breadth of analysis
10 that, you know, has been undertaken in order to ensure that
11 these issues have been raised and discussed today. So
12 thank you.

13
14 I don't think - so then we're adjourning, what, until
15 10 o'clock tomorrow morning?

16
17 MR FOX: 10 o'clock tomorrow morning.

18
19 THE COMMISSIONER: Unless anyone is told to the contrary,
20 I will adjourn until 10 o'clock.

21
22 **AT 12.10PM THE SPECIAL COMMISSION OF INQUIRY WAS ADJOURNED**
23 **TO WEDNESDAY, 1 NOVEMBER 2023 AT 10AM**

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