

**MARK EDWARD LUNDY**

Applicant

v

**THE QUEEN**

Respondent

Hearing: 2 May 2019

Coram: William Young J  
O'Regan J

Appearances: J H M Eaton QC, J-A Kincade and J Oliver-Hood for  
Applicant  
P J Morgan QC and M L Jepson for Respondent

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**ORAL LEAVE HEARING**

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**MR EATON QC:**

If it pleases Your Honour, Eaton appearing on behalf of Mr Lundy and with me Ms Kincade and Mr Oliver-Hood.

**WILLIAM YOUNG J:**

Thank you Mr Eaton.

**MR MORGAN QC:**

May it please the Court. Morgan for the respondent and I'm assisted by Mr Jepson.

**WILLIAM YOUNG J:**

Thank you Mr Morgan. Mr Eaton.

**MR EATON QC:**

If the Court pleases. It's trite to recognise that guilt in New Zealand should only be determined by a jury following a fair trial and only where legally admissible evidence was considered, but of course the proviso permits an appellate court to determine guilt, but the threshold for the application of the proviso is high and in the words of this Court in *R v Matenga* [2009] NZSC 18, [2009] 3 NZLR 145 can only be applied when there's no room for doubt about guilt. *Matenga* focused on the first factor, that is inevitable guilt.

**WILLIAM YOUNG J:**

Does the court have to be satisfied to a level higher than beyond reasonable doubt?

**MR EATON QC:**

In my submission that is the meaning of words like "no room for doubt". In my submission the application, the proviso is consistent with an approach that is beyond, a finding of beyond reasonable doubt.

**WILLIAM YOUNG J:**

So is there anything that supports that other than remarks of the kind that you've just cited from *Matenga*?

**MR EATON QC:**

It is the remarks of the kind and when one looks, for example, at the majority in *R v Howse* [2005] UKPC 30, [2006] 1 NZLR 433 and the way they treated the confessional evidence and the significance of it, and the language suggesting that there is simply no room for any doubt. That's the language

which is used in cases where the proviso hasn't been applied in assessing inevitable guilt.

**WILLIAM YOUNG J:**

So if the court is of the view that there's no room for reasonable doubt, but a doubt less plausible than a reasonable doubt arises, it should not apply the proviso?

**MR EATON QC:**

That's right. The approach is there is no room for any doubt whatsoever about guilt here therefore we can get over that hurdle applying the proviso and then quite independently of that we must consider whether the trial was fair.

Now so *Matenga* didn't really focus on the second factor of fairness but the general submission made on behalf of Mr Lundy is that there's a substantial miscarriage that's going to arise when there's a guilty verdict that doesn't truly represent the findings of the jury on the merits of the case. I think that came out of this Court in *Gwaze* where I was on the other side arguing that there ought not be a retrial.

Here the Court of Appeal, and it was without the benefit of hearing any oral argument –

**WILLIAM YOUNG J:**

Although you were offered it, weren't you?

**MR EATON QC:**

We were offered it, that's right. We were offered it in the same minute that asked us to address whether there ought to be a retrial in the event the conviction was going to be quashed and the defence took the position that the way in which the proviso arose, which was with the Crown denying reliance on it throughout the course of the legal argument and then after the three day hearing determining that it had now read the signals from the Court that it had

better, that the assessment was that the written submissions would deal with that and the issue about –

**WILLIAM YOUNG J:**

Just so I understand that, and Mr Morgan will explain, I suspect the Crown didn't expect the Court of Appeal to reverse itself on the messenger RNA issue.

**MR EATON QC:**

That was the Crown argument. The Crown fought vigorously to hold onto it.

**WILLIAM YOUNG J:**

Yes, yes. But it may have thought that the Court would follow the earlier decision, which may explain why the proviso wasn't argued then so it became apparent –

**MR EATON QC:**

Yes, yes, what actually happened at the hearing was, I think it was Justice Asher, on two occasions said to my friend, "Sounds rather like you're arguing proviso as opposed to admissibility." My friend said, "No I'm not." And then an hour went on and Justice Asher said again, "Still sounds like proviso," and then the following day a minute was issued saying, "Well let's have your position clarified," and that's when the Crown said, "Okay, we will rely on the proviso and we'll file submissions accordingly." So there wasn't any oral argument.

**O'REGAN J:**

Are you taking a point that there's some sort of natural justice failure in the Court of Appeal?

**MR EATON QC:**

In my submission this case engages section 26 – natural justice – in the Bill of Rights.

**O'REGAN J:**

But if you were asked and turn it down that's hardly the Court's fault, is it?

**MR EATON QC:**

Well it's part of the narrative of how the proviso's been applied in this case, as is the fact that we got a decision 12 months after the oral hearing, which is a significant period of time, and a very, very, lengthy judgment, all of which reflects the complexities of this case and its history, which in my submission supports the applicant's argument, and this was never a case where it was appropriate for the proviso to be applied. I want to spend just a little bit of time making sure the Court understands the history of how the mRNA evidence came about.

**WILLIAM YOUNG J:**

I think we do understand that. Just touch on the headlines.

**MR EATON QC:**

I'll do it briefly. It came about, so trial 1, Mr Lundy was convicted acting on advice that this was his human CNS tissue, that's how trial 1 proceeded.

**WILLIAM YOUNG J:**

Well, wasn't it advice, was it advice that it was human CNS tissue or...

**MR EATON QC:**

Everybody assumed it was human CNS tissue, there was no consideration of other possibilities. It was only years later in 2013 when it came before the Privy Council that concerns around the reliability of the expert evidence that had been given both in relation to the pathology with time of death, in relation to the reliability of immunohistochemistry, that questions were then raised as to whether in fact it could be sustained that it was in fact human. So he was reliant on advice throughout. And of course at this first trial that concession was made and there was an extraordinary shift in case because there the Court of Appeal upheld as reasonable inferences that he had been seen by a woman called Mrs Dance, that he had done this extraordinary fast drive in the

early evening, that the time of death was 7.30, that he had manipulated a computer, all finding the Court of Appeal said were reasonable inferences to be found by the jury on the expert evidence that had been adduced, which just gives some context to this case about the risks of drawing inferences which are taken from expert evidence which is disputed.

**WILLIAM YOUNG J:**

Who said at trial, the first trial, that the CNS tissue was human?

**MR EATON QC:**

Dr Miller.

**WILLIAM YOUNG J:**

I thought he simply – I'm only just looking at the judgment of the Court of Appeal. I thought he, I suppose, drew that inference from the conjunction of the CNS tissue and the DNA.

**MR EATON QC:**

Well, there was never an issue about it possibly being not human, it was not an issue. But following the Privy Council hearing we know that what I describe as a gap or void became apparent to Crown in its case. The very essence upon which the Court of Appeal have applied the proviso, that is, there is no gap or void, was not how the Crown dealt with it. They sensed a void between DNA and CNS, meaning that doesn't prove guilt, we need to find something that will make that link and fill that gap in order to prove Mr Lundy's guilt. They had the IHC, which is, the Court will be aware is a novel use of IHC in a forensic setting, never before Mr Lundy's case has it been used to identify tissue, never since Mr Lundy's case has it been used to identify tissue, and we end up embarking on the novel use of mRNA, never used before, never used again. There's little wonder Mr Lundy says, "I've been the guinea pig through the criminal justice system of trial and error with novel and junk science".

So what happened after the Privy Council hearing is that the Crown went on what I describe as a voyage of discovery. First of all Dr Miller, having been heavily critiqued in the Privy Council, got what we called this “bucket brain” and he had a friend who was a gynaecologist at a teaching university in the States where somehow he managed to get his hands on a fresh brain, all quite improper, and led to sanctioning of that hospital in terms of it having access to organs, and he did some more testing on a fresh brain to try and overcome shortcomings. The Crown went to have the slides that were in dispute tested by a process called FISH, fluorescent in situ hybridisation, that was intended to show it was human and female, didn’t, so that went by the bye. The NFI, which is the Dutch laboratory, were briefed in early-2014 and asked whether they could determine if it was human, there was laser microdissection work carried out by the ESR New Zealand because that could potentially tell you whether it was human, that was unsuccessful, and then they said, “Well, we’ve still got the DNA from the elutions carried by ESR, let’s get them tested, let’s, rather than looking at the tissue and trying to show that that’s human, let’s go to that DNA and show there’s nothing else but human there,” went off to a specialist in California and low and behold, when we talk about uncanny coincidences in this case, it came back positive DNA for beef, cow and pork, which of course was the absolute opposite of what the Crown were seeking. So it was the NFI evidence which came to the forefront.

Now the defence argue in terms of assessing the application of the proviso would be that in understanding the significant effect of this evidence in the context of the trial, one has to look at the broader picture of the efforts made to get this evidence, the extraordinary lengths they would go to, and it’s just inconceivable that the Crown would do that unless they had formed the view, the proper view, that there was a void or a gap that needed to be filled in order to prove guilt. So the NFI came up with their results, and when they suggest that this is probably human, that is immediately going to be offered into evidence, and there is a substantial challenge and, you know, this going through the process pre-trial you’ll be familiar with, eight full days of legal argument before Justice Kós as he was in the High Court here in Wellington, with expert evidence being given from all around the world at odd hours, as

this was heavily contested, this evidence. Sijen was the important Crown witness and she was described as being impressive. There's some irony in the fact that at paragraph 116 of his decision Justice Kós described Mr Morgan saying that Dr Sijen's caution was to be applauded and I've said in the written submissions at trial the Crown rather understating the, or commenting critically on the cautious approach that had been taken by the experts. But His Honour said that this mRNA analysis was going to be very important evidence along with the other circumstantial evidence, including the DNA and the IHC. So pre-trial it's not just the IHC plus DNA –

**WILLIAM YOUNG J:**

I don't want to be rude or anything, but for myself I understand that it is a significant feature of the case that evidence which the Court of Appeal has said wasn't particularly material, was beforehand seen as very significant.

**MR EATON QC:**

That's right.

**WILLIAM YOUNG J:**

And to which a huge amount of detail, I mean I think –

**O'REGAN J:**

I think...

**MR EATON QC:**

Okay, could I just make one point. There's one passage in the Court of Appeal decision pre-trial that I haven't referred to in the written submissions, which I want to refer to, that's the majority ruling of Justices Harrison and French and what they said is at paragraph 97. "We accept that the evidence is likely to be a critical part of the Crown case and potentially highly prejudicial to Mr Lundy. However, the issue is unfair prejudice." So there's the Court recognising that this is critical. Justice Ellen France said it was pivotal –

**WILLIAM YOUNG J:**

I actually do understand the point.

**MR EATON QC:**

Yes, so the point being, and it carried out at trial, the evidence was important. The defence went to such lengths to try and get it out, they came to this Court, and I think both Your Honours sat on the leave application, said go to the trial Judge. Went to the trial Judge, the trial Judge said it's too complicated to deal with it now, deal with it post-conviction if you're convicted. Four days of trial, 396 pages of evidence, it's about 14% of the total evidence was given on mRNA. The subject of a seven page handout where His Honour said it was the important link, and of course we know that post-trial, following conviction the defence again fought vigorously to have it excluded. Almost the full three days of oral hearing were devoted to the admissibility of the mRNA and the Crown were not relenting on their arguments about it, and even as we built up to the Court of Appeal hearing, and after the Court of Appeal hearing, we were still both sides finding affidavits from the two competing experts about it. That's how hotly contested it was. Why, because it was so significant, and you couldn't just extract it from the trial and say, well the DNA and the CNS was enough. It was the combination of the three that allowed the Crown to say it's his wife's brain tissue on the shirt. It was the combination of the three.

**WILLIAM YOUNG J:**

Can I just go back to the point you raised earlier, that it was at the first trial said that the CNS tissue was human. I'm looking at para 12 of the Court of Appeal judgment, which refers to the evidence given by Dr Miller at the first trial. "His evidence was that tissue found on Mr Lundy's shirt was CNS tissue. There was also evidence that Mrs Lundy's DNA had been found on the shirt where the CNS tissue was located. This led the Crown to allege the CNS tissue must have also come from Mrs Lundy, a proposition not challenged by the defence at the first trial." So it wasn't Dr Miller's evidence, it wasn't a link made by Dr Miller between the CNS tissue and it having a human origin, it was rather the –

**MR EATON QC:**

I'm not sure if I can take you to the evidence where he's talking about it. It was only ever discussed in terms of it being human because that was the concession made so there was no issue around that.

**WILLIAM YOUNG J:**

Well I just wondered because it doesn't read that way in the Court of Appeal. I mean I took it that the assumption was that if it was CNS tissue it must have been Mrs Lundy's because it's found in association with her DNA.

**MR EATON QC:**

Trial 1 was run completely on contamination.

**WILLIAM YOUNG J:**

Yes.

**MR EATON QC:**

Oh, because it's human CNS tissue.

**WILLIAM YOUNG J:**

All right, but it's just you were suggesting something earlier in your submissions that sort of slightly snagged with my understanding of the case.

**MR EATON QC:**

I'll see if I can get anything from Miller, but my understanding, obviously I wasn't involved and neither was my friend at trial 1, but anyway it was a non-issue. So I then in the submissions talked about how the Crown dealt with the mRNA evidence at trial. It dealt with it as a whole. You've got CNS, you've got IHC and you've got mRNA, and my friend repeatedly throughout the submissions, closing address, was effectively saying, "Look, it's been presented extremely conservatively by the NFI but they don't need to be that conservative and you certainly don't need to be that conservative." It provided the platform for the submission that it's his wife's brain tissue on the shirt.

Significantly, it provided an answer to any suggestion of a foodstuff narrative in the defence case that this was, may be an innocent explanation.

**WILLIAM YOUNG J:**

Well, it didn't provide an answer. All it said it was more likely than not that it was an answer.

**MR EATON QC:**

It was used to provide an answer for it. If the jury accepted her evidence –

**WILLIAM YOUNG J:**

Sorry, but it wasn't a complete answer.

**MR EATON QC:**

No, not a complete answer, but if the jury accepted her evidence that closed down that bit of the defence case.

**WILLIAM YOUNG J:**

Well, I don't think it did close it down.

**O'REGAN J:**

Because all she said was it was more probable, so that left a very strong possibility that it wasn't.

**MR EATON QC:**

That's right. And then the Crown said, "She's expressing it so conservatively but we all know that's how experts give their evidence, when you look at all three together it's conclusive proof."

**O'REGAN J:**

But you're saying, you want to argue on appeal that you would have argued the case differently if the mRNA evidence wasn't there.

**MR EATON QC:**

Yes.

**O'REGAN J:**

But what more would you have said? I mean, the argument was it was from food, that argument was clearly still open. I mean, there was now some Crown evidence saying, "Well, we have a test that says it's more likely not to be," but that was all there was, wasn't it?

**MR EATON QC:**

Well, the defence argument's a lot stronger if there's no junk science saying it's not –

**O'REGAN J:**

Yes, but it doesn't mean you didn't argue it because you were faced with a Crown case that made it a non-argument, it was clearly disputed, wasn't it?

**MR EATON QC:**

Yes, that's right, yes, it was clearly disputed. But I'm not quite sure how that plays into an assessment that the trial's fair and inadmissible evidence is not important.

**O'REGAN J:**

No, that's not the context I'm asking you it. I'm asking you in the context of your argument that, "We would have argued our defence, our defence case would have been different," and I'm just asking, well, why would it have been different, because you still had the argument open to you, it was just that you had to confront a bit of evidence that was, you know, suggesting the contrary.

**MR EATON QC:**

Well, the defence case was significantly impacted by the mRNA evidence, that's surely inescapable as a conclusion. The trial was starting in January 2015 or early February 2015. From mid-2014 the defence were just being swamped to deal with mRNA. And remember, this is a case where it was only just days before trial the Crown shifted their position and said, "We no longer allege time of death to be seven to 7.30." So trying to work out

how the defence would have been run if mRNA never existed and what the focus would have been is speculative, but it's –

**WILLIAM YOUNG J:**

But you would have still, the defence would have wished to show that the CNS tissue was or may have been animal in origin?

**MR EATON QC:**

Yes.

**WILLIAM YOUNG J:**

And that's exactly what –

**MR EATON QC:**

Well, and I would go further and say that if not confronted with the mRNA then the defence wouldn't have been so inclined to make the concessions about IHC.

**WILLIAM YOUNG J:**

Well, that's a slightly different point.

**MR EATON QC:**

What I'm saying is the mRNA evidence was so significant it had a major effect on trial preparation and the way in which the trial was run. The food narrative was and could have been shut down by the jury if they accepted the Crown case on mRNA. Without it –

**WILLIAM YOUNG J:**

Because it's at least 51% likely that it was human in origin.

**MR EATON QC:**

Well, it was more than that. Her numbers in terms of the test were seven out of 12, and she expressed it as being more probable.

**WILLIAM YOUNG J:**

58% probable.

**MR EATON QC:**

But if you read the summing up of the closing address you'll see how it got used, and it says, "You've got the DNA, you've got the CNS and you've got the mRNA. All three together inevitably that leads to a guilty verdict." And the question is then on an appeal, having said an essential component of that evidence can be taken out, what are you left with and how do you assess whether guilt was inevitable and whether the trial was fair?

Can I make this point? If the jury had heard the evidence that Mrs Lundy was brutally assaulted and her brain exposed and splattered around the room and an expert says, "I've assessed it and that is probably human," and the Court of Appeal said, "That's highly relevant and admissible and highly prejudicial," the jury would have been entitled to convict on that evidence. If it was just the DNA they wouldn't have been entitled to convict, if it was just the CNS they wouldn't have been entitled to convict. On the way the case was presented and considered by the Crown at pre-trial, if it was just the CNS and the DNA they wouldn't have been entitled to convict. But mRNA alone was a basis to do so because how else, why else would you have human DNA on you other than contamination? So they would have been entitled to convict on that alone, that's the significance of the evidence in the context of the trial. But of course the Court found otherwise.

So we had, you're conscious of the competing cases here. The defence basically didn't really confront the mRNA strongly in its summing up, closing address, rather Mr Hislop QC on behalf of Mr Lundy said, "Look, it's impossible for him to be guilty because he didn't have enough fuel, because the time of death just doesn't work on the expert evidence, because we know he's alibied in Wellington until 1.00 am and there's a witness from next door who sees the door open at 10.52, therefore somebody's gone in at that time. Those are the three issues that the defence advances as a possibility. If the jury accepted the mRNA evidence it answered them all. The jury didn't have

to get into the fuel analysis, which was quite complicated, if it accepted the mRNA evidence. It answered the defence case.

**WILLIAM YOUNG J:**

Okay, well, there's a limit to what we can say. I struggle with the proposition that a 50%, 58% probability of something being true in a criminal trial is an answer to an opposing contention.

**MR EATON QC:**

Well, it was found by the Court of Appeal to be clearly substantially helpful to the jury in deciding a critical issue in dispute.

**WILLIAM YOUNG J:**

Yes, I understand that, I understand how it could be helpful, but I don't understand how it shuts down the debate.

**MR EATON QC:**

Because if you accept that evidence, if I find it's probably human –

**WILLIAM YOUNG J:**

There's a 42% probability that it's not human.

**MR EATON QC:**

And the answer to that is it was not relevant and it wasn't admissible because it wasn't substantially helpful, that's the real answer to it. But that's not how it was deployed by the Crown at trial.

**WILLIAM YOUNG J:**

Okay.

**MR EATON QC:**

And in the event that leave is granted we can go through in detail the summing up which, closing addresses, which talk about that.

But what the applicant says is the competing cases which were, there was about seven or eight factual strands where there were strong arguments. The Crown said the fuel helps them, the defence said the fuel provides the defence. The mRNA evidence was capable of resolving each of those factual disputes, and that's the significance of it. It was capable of resolving the dispute around time of death. If the jury accepted it and accepted my friend's submission that the combination of the three factors proved it was Mrs Lundy's brain, then that answered all the defence case and a finding of guilt was then inevitable.

So what it meant was, for the defence, is that there was quite a lot of focus on contamination and less focus on the foodstuff narrative, in a case where the foodstuff narrative was alive and well, particularly because of the finding of this animal DNA, which is an uncanny coincidence given it was the only sample that was retested where a search was made for material other than human brain tissue. Because my friend in his submissions talks regularly about only CNS tissue was found –

**WILLIAM YOUNG J:**

He's talking about the two stains though, isn't he?

**MR EATON QC:**

That's right, he is.

**WILLIAM YOUNG J:**

So we have photographs of the stains?

**MR EATON QC:**

Well, they're in the trial record, yes. And there's measurements and picograms as to what it amounted to, it's fractions, it's the same as the –

**WILLIAM YOUNG J:**

I sometimes find it easier to envisage something if I can see a photo of it. I think I can envisage it.

**MR EATON QC:**

Yes. Well, I just urge some care with the photographs because we have a number of enlargements which my friend, we were just looking at this morning, eight flakes or dust, and they've been blown up so significantly they quite distort what the picture was. But what I'm suggesting is when the Crown says there was only CNS tissue found, Dr Miller and the IHC clinicians only were ever looking for brain, they've never looked for anything else or any other possible explanation, and in fact Dr du Plessis found skin flakes which he thought could be from dandruff as well, in the same sample, so it wasn't just that. But when you look at, whether it be the DNA or the CNS, for something beyond what you've always been focusing on, that is, the Crown finally said, "Well, let's see if there's anything animal there to put that to bed," they find animal. Now that's the reality which said, you know –

**WILLIAM YOUNG J:**

But that's somewhere else on the shirt, isn't it?

**MR EATON QC:**

No, that's from the DNA sample taken from the pieces of fabric cut out by the ESR.

**WILLIAM YOUNG J:**

Is it?

**MR EATON QC:**

Yes. And so contamination, was a live issue as well, and it was Professor Ironside who said, "Look, I think you need to give some consideration to the possible food narrative," because what had happened, and it's very hard to run this argument without getting too bogged down in the facts but the sample on the sleeve was taken by Sutherland who's a witness at the ESR and what's called a dab slide but he basically scraped it off and got what's described in terms of "chunks", I mean, it's tiny, tiny fractions but he took that dab slide. When that was analysed, it didn't show anything, couldn't be identified, couldn't be identified as human, and it was heavily degraded,

which made it extraordinary and a real issue about why, when they then have Dr Miller look at the slides taken from the cuttings of the sleeve itself, he says, "I can see brain tissue here", and yet on what should be the first sample taken, the obvious sample, never been able to, which led Ironside to say "Well, that means you've got issues of contamination of a possible foodstuff that need to be properly considered", and of course, we had the animal DNA as well. But if you accept Sijen's evidence, and the Crown theory about it, it puts that defence to bed.

One of the other issues, and I know, I think it was Your Honour Justice O'Regan, in this decision, was it, talked about credibility or reliability being a factor where you'd be found reluctant to apply the proviso, and I don't want to overstress it here but in the mire of junk science that Mr Lundy has faced throughout the last 17 years, he was also confronted with a cellmate confession. Witness X gave evidence at trial and basically, if the jury accepted that, there was a confession, how do the jury deal with that in the context of the mRNA evidence? Did that prop it up and give them the explanation as to why he killed Amber? Because that's what witness X talked about.

The defence put a strong allegation against the brother-in-law Glenn Weggery. That was a fair and square credibility issue. There was a strong attack on the neighbour Mr Tupai as to his reliability as to what he had seen. That was credibility and reliability. The defence spent several pages in closing attacking police officers in relation to the contamination case in the chain of evidence, that gave issues of reliability and credibility. And of course this case was riddled with credibility and reliability, particularly reliability findings, as evidenced by the fact that, you know, Mrs Dance said she saw him at trial 1, Mr Kleintjes, the computer expert, said at trial 1 he manipulated the computer, Dr Pang said at trial 1 time of death was seven to 7.30. Issues of reliability loomed large in this case, it couldn't be simply, as the Court of Appeal have done, with respect, said it's just a case about science and we don't need to look any further.

So the defence submission is that this was never a case for the proviso to be applied, that the assessment in terms of inevitable guilt was flawed and the Court failed to properly consider the true consequences of this evidence in terms of the other evidence and the defence case generally, and we've talked about whether it's a back-looking sort of going to the second trial and then sort of clinically removing that evidence and saying, "I can now then carry out that assessment," and we're saying this is just not one of those case where it was possible to do that. This evidence, although described as a single error, permeated throughout the entire trial, pre-trial and post-trial, and so the defence say that that assessment as to inevitable guilt was flawed. And the defence say also that the approach in terms of trial fairness is flawed, and the Court of Appeal have conflated those two factors.

**O'REGAN J:**

What two factors?

**MR EATON QC:**

The factors of, factor one, applying the proviso is guilt inevitable and, factor two, notwithstanding, is the trial fair? And the Board in *Randall v R* [2002] UKPC 19, [2002] 1 WLR 2237 and other cases talked about everybody is entitled to the absolute right to fair trial, even the guilty are entitled to a fair trial, meaning it's not appropriate in seeking to apply the proviso to go to the balance of the evidence that's admissible and say, "We think that's enough," and effectively conflate the finding inevitable guilt with the fair trial consideration.

**WILLIAM YOUNG J:**

Do you say the Court of Appeal did that?

**MR EATON QC:**

I say the Court of Appeal did do that.

**WILLIAM YOUNG J:**

Whereabouts?

**MR EATON QC:**

382 down through to 392.

**O'REGAN J:**

So you're saying that having done the first limb there was then a completely discrete issue while having regard to the fact that there was a trial where evidence that shouldn't have been there was there, that it's, whilst it's nevertheless a fair trial?

**MR EATON QC:**

That's right. A distinct investigation which does not, should not be determined by a review of what you think the strength of the admissible evidence is. So at 382 the Court was dealing with – so they're dealing with fairness from 366, and at 382 they say, "Well, the stated evidence was expressed in less certain terms than the conclusions about CNS and DNA, which were on the preponderance far more compelling indicators of guilt. In that respect the association of DNA with the tissue analysed must have been compelling," so there's the Court in considering fairness saying the DNA evidence is compelling, and then if you go over to 392 where they conclude they say –

**WILLIAM YOUNG J:**

But, say, look at 384. They've confronted your argument that the defendant was required to run a different case.

**MR EATON QC:**

Yes.

**WILLIAM YOUNG J:**

So that's a straight fairness issue.

**MR EATON QC:**

Yes.

**WILLIAM YOUNG J:**

And they've noted, I think, the cases which indicate that the unfair trial leg of the argument assumes a reasonably high threshold because otherwise the proviso would be excluded.

**MR EATON QC:**

Yes.

**WILLIAM YOUNG J:**

So not every irregularity or every piece of inadmissible evidence admitted.

**MR EATON QC:**

That's right. And they've looked at the conflicting judgments, the strong dissenting judgment in *Howse* –

**WILLIAM YOUNG J:**

But what I'm really saying, I didn't read the judgment as saying, "Oh, well, it's a strong case and therefore it's a fair trial."

**MR EATON QC:**

Well, what doesn't appear in the fairness assessment, so if we look at the fairness consideration in terms of the evidence as being – and the Court did nominate this as being accepted from the High Court of Australia in *Wilde v R* (1988) 164 CLR 365 – the significance of the inadmissible evidence in the context of the trial, have a look at that in deciding whether it was fair, because not all inadmissible evidence will give rise to an unfair trial, have a look at the significance of the inadmissible evidence in the context of the trial, and that's why I say in terms of considering the fairness limb the Court had to say, "Well, the context of this trial is look at how hard the Crown battled to get this in, look how it was deployed by the Crown at trial, look at what the Court of Appeal was saying about the prejudicial effect of this evidence pre-trial, and then we've got natural justice issues arising." We have a perception where a Court is saying, "This is going to cause you significant prejudice but we think it's highly relevant, pivotal –

**WILLIAM YOUNG J:**

Yes, no, this is the change of stance which I agree is quite striking.

**MR EATON QC:**

Yes. Which leads me to say it's all just a bit rich now then to say, "We didn't need it and we didn't want it." In *Howse*, the Privy Council said, there was an argument that, "Oh, we would have called the defendant if this inadmissible evidence hadn't been there," and the Privy Council said, "Well, we accept that that consequence of the inadmissible evidence on trial strategy could rear its head under the fairness consideration but in that case that's just not conceivable you would have called him because the evidence against him was just so damning."

**WILLIAM YOUNG J:**

Yes, but we've got nothing other – and I'm not criticising here – but we've got nothing other than your assertions as to the counterfactual to indicate that the trial would have been conducted differently.

**MR EATON QC:**

Well, you have years of experience to accept that if in the months building up to a very complicated trial that's been around for years and years and years and there's been a significant shift in the Crown case that you're told about or is developing on the eve of the trial and then you're dealing with brand new scientific evidence that's never been confronted by anybody else anywhere in the world, that's a significant issue the defence are going to deal with –

**WILLIAM YOUNG J:**

Well, it's probably distracting, I mean, I understand that argument.

**MR EATON QC:**

That's right. And so the distraction is part of the context to the trial and it has an impact on trial strategy. I wasn't trial counsel, but we do know that the defendant made concessions about CNS which we are vigorously challenging both in the Court of Appeal and we want to challenge in this Court as well.

**WILLIAM YOUNG J:**

Well, we're going to run out of time because another team is going to come and push us off the bench at 11.30.

**MR EATON QC:**

Yes, I'm conscious of that.

**WILLIAM YOUNG J:**

So you may want to talk about the IHC issue because, I mean, I – it's got a pretty unhappy history.

**MR EATON QC:**

It's got a very unhappy history. I guess the short point is this, because I can summarise it. Why should Mr Lundy be doomed by advice that he received which he is entirely reliant upon in the context of novel science, never used before, never used since –

**WILLIAM YOUNG J:**

Okay, just so I understand it. IHC evidence not challenged at trial or in the Court of Appeal, in the first trial or in Court of Appeal, in issue in the Privy Council –

**MR EATON QC:**

Yes.

**WILLIAM YOUNG J:**

– big contest before the second trial, evidence called –

**MR EATON QC:**

No, not a big contest before the second trial, it sort of fell away at the pre-trial.

**WILLIAM YOUNG J:**

But wasn't there evidence called on it?

**MR EATON QC:**

Yes, at the pre-trial, and the objections effectively fell away and the argument was focused on the mRNA.

**WILLIAM YOUNG J:**

Okay, but it was in issue, there was evidence called, the point was in issue. I think Mr Hislop didn't really push it in his closing submissions.

**MR EATON QC:**

Yes, that's right.

**WILLIAM YOUNG J:**

Then you want to rely on the evidence essentially that was available at trial and not called to show that the IHC evidence was wrong or inadmissible.

**MR EATON QC:**

I want to take up the invitation which the Privy Council gave in 2013 where it didn't determine the admissibility of IHC where it said "This is worthy of a proper debate and it's never happened".

**WILLIAM YOUNG J:**

Okay. Well...

**MR EATON QC:**

That's what the Privy Council said, "It's worthy of debate. We're not determining the admissibility". And then it faded away but it faded away in the context of the mRNA then turning up after the Privy Council decision and the question is simply this: *Daubert v Merrell Dow Pharmaceuticals Inc* 509 US 579 (1993) sets the standard and the Court of Appeal decision in *Lundy*, this Court of Appeal decision, says "Yes, that applies", and with the mRNA, they have gone through the four *Daubert* factors and said "mRNA doesn't fit but when it comes to IHC, yes, IHC doesn't fit at all" and there's a whole series of other flaws associated with it, "but there was consensus and you consented to it so you're not revisiting it and we're satisfied it's admissible and reliable", and

I'm saying that's not a substitute for the legal threshold for admissibility and it needs to be seriously debated because all we've got is the subjective opinions of clinicians who use IHC, they are not experts in IHC because there's no such field of expertise, and they are giving their subjective opinions when they are searching for brain when that is not their practice. Their practice is to look at identified tissue and find disease, and now it's being used to say "I've got unidentified tissue. Can you tell me if it's brain?" Not "Can you tell me what it is?", "Can you tell me if it's brain?" And when one reads the PCAST report from 2016, which came after trial, and where it talks about foundational and scientific validity, this falls short on so many levels.

**O'REGAN J:**

So is this effectively a counsel error argument?

**MR EATON QC:**

Well, it hasn't been advanced on that basis.

**O'REGAN J:**

Do we know why it wasn't contested after Justice Kós' decision?

**MR EATON QC:**

I think we could read as to why it was because the defence experts conceded it. So the defence were being guided by expert advice. You've said "Yes, that's okay, it's CNS".

**WILLIAM YOUNG J:**

But at the time the defence experts conceded and that was acted on by Mr Hislop, he did know that Professor Sheard had a different view.

**MR EATON QC:**

Yes. That's why I had concerns. I think it's fair to say the concerns gathered momentum when we had the PCAST report which talked about these foundational concepts of validity which just don't apply to it. So the question I would pose for this Court is "Is the subjective consensus opinions of the

handful of experts sufficient to overcome the otherwise established test for admissibility of new science?" Because the court's the gatekeeper. There's been all sorts of problems and there's lots of international debate going on about the bar being set too low in terms of the admissibility of new science or junk science. For Mark Lundy, with all due respect, he has been the victim of it and he's still the victim of it and that's what really, I guess, in the context of the trial, says this is a substantial miscarriage.

So there's that issue. There are factual errors I've talked about that have been made about DNA and I stand by the submission that the Court made fundamental errors about what the DNA could tell you. Reliance on quality and quantity to draw the inescapable conclusions the Court of Appeal drew is simply wrong. It was not supported by the evidence given at trial. The Crown did not seek to advance the case as strongly as the Court of Appeal had found it, that is, DNA and CNS are the answer, and I can confirm that because my friend in his proviso submissions said there's an inference that can be drawn from the CNS and the DNA and then once you've drawn that inference, the balance of the evidence leads to a finding of inevitable guilt. They were putting it all together but the Court of Appeal said "No, the DNA basically, is inescapable conclusion this has come not from a domestic transfer". The evidence didn't support that, the expert publications internationally don't support that, and they said the CNS tissue then in combination is damning, and with respect, that was just overstating the strength of the evidence and was wrong about the evidence and misunderstanding the essence of DNA and what quality and quantity means.

And the other issue is this demeanour issue. I don't think you want to hear me on that.

**WILLIAM YOUNG J:**

No, I understand that.

**O'REGAN J:**

No.

**WILLIAM YOUNG J:**

It's a very straightforward issue.

**MR EATON QC:**

I'm conscious of time. It is extremely difficult for counsel in a case that's been around for such a long period, so such a complicated history, to try and do justice to it because –

**WILLIAM YOUNG J:**

Well, we really –

**O'REGAN J:**

If you get leave, you'll get more time, we assure you that.

**MR EATON QC:**

Yes, so the essence of it is this was not a case for the application of the proviso, the Court of Appeal have erred in their assessment as to whether guilt was inevitable, and in terms of considering fairness, the Court has placed too much weight on the compelling nature of the DNA and CNS as opposed to doing what the Board in *Howse*, and particularly what the minority judgment said, is you've got to look at the significance of that inadmissible evidence in the context of the trial. That doesn't mean look at the other evidence to see if it outweighed it, that's to conflate the first question about deemed insufficient to prove guilt inevitably. You've just got to look at the inadmissible evidence and say, "How was it utilised, what was the context in which it was utilised?" and that tells us how significant it was and whether the trial was fair. This trial was not fair, this was significant, important evidence, and we don't need to – my friend said – can I just finish on this point? – my friend said in the Court of Appeal in arguing mRNA was admissible, and it's recited in the judgment at paragraph 233, Mr Morgan said that it's, and I'll use the words of the Court, "In terms of s 25 of the Evidence Act he maintained the jury would 'unquestionably' have obtained substantial help from the evidence in ascertaining facts of consequence to the determination of the proceeding." The fact of consequence to the determination of the proceeding was is this

Mrs Lundy's tissue on his shirt? The Crown position, unquestionably you get substantial help.

**WILLIAM YOUNG J:**

This is the striking change in stance which I do have on board.

Thank you, Mr Eaton. Mr Morgan.

**MR MORGAN QC:**

May it please the Court, my answer to the submissions made by my learned friend are that if one examines the trial record, as the Court of Appeal did, and reads their judgment on the application of the proviso, my learned friend for the applicant is over-stating the effect of the mRNA evidence. I accept at once that there was reliance placed on it at trial but it was simply one of the strands, which is essentially the point that the Court of Appeal was making. There's a passage right at the end of the judgment where they refer to what the trial Judge said to the jury where, after he had given the jury his handout about how they were to deal with the complicated evidence in the case, simply observed to them that if you accepted the probability evidence that Dr Sijen had given it did make the Crown's case stronger. But he then said if you put it to one side, as he plainly recognised the jury were perfectly entitled to do, you then carried on to consider the remainder of the evidence, and it was the combination of the central nervous system tissue and the DNA evidence which was the cornerstone of the Crown's case and it was the cornerstone of the Crown's case in support of the application of the proviso. This whole contest now raised again in the Court of Appeal and in this Court that there is some error or fundamental problem with IHC is, in my respectful submission, completely misconceived. IHC was not a test, the neuropathologists were not talking about a test, the neuropathologists were talking about applying stains and looking down a microscope at central nervous system tissue, which is what we do every day, using long-recognised antibodies and seeing cell structures that we recognise as being the structures of the cell in the brain or central nervous system tissue, so –

**WILLIAM YOUNG J:**

There was evidence of blood or traces of blood and blood vessels?

**MR MORGAN QC:**

Yes, both. Both observed, and there were photomicrographs of it, you can actually see it in the fabric slices, and Dr du Plessis added an antibody to demonstrate its existence. So both blood and blood vessels in the cellular material found in the fabric.

**WILLIAM YOUNG J:**

So does the blood produce a DNA reading or not?

**MR MORGAN QC:**

Yes, well, blood can, yes, certainly.

**WILLIAM YOUNG J:**

So is it possible that the DNA in the elution came from the blood? You just can't say, is it not possible to say?

**MR MORGAN QC:**

It's not possible to say that the witnesses –

**WILLIAM YOUNG J:**

It could have come from the CNS, I take it?

**MR MORGAN QC:**

Oh, yes, absolutely, and of course if it is C – well, it was CNS according to all the neuropathologists, including the two called for the defence, so it was unquestionably CNS, they all said, "We could only see CNS cells in the material, we could not see anything else at all" –

**WILLIAM YOUNG J:**

Sorry, how does that reconcile with them seeing blood and blood vessels?

**MR MORGAN QC:**

Because CNS has blood and blood vessels in it.

**WILLIAM YOUNG J:**

Oh, I see, alright.

**MR MORGAN QC:**

In fact the irony and is one of the criticisms in the Privy Council back in 2013 is that if it was central nervous system tissue it should have had blood and blood vessels in it.

**WILLIAM YOUNG J:**

Well, I saw that, and it did.

**MR MORGAN QC:**

Yes, and of course it did. So to revert to where I was, as I say, IHC is not a test, this is men looking down microscopes at something they look at every day using stains they look at every day and recognising cellular structure and saying, "We have," and recognising there were no less than four neuropathologists from North America and the UK saying exactly the same thing, and the two pathologists who were enormously experienced pathologists, all saying, not using a test, "We're actually looking at something that we recognise, a cell structure that you only see in central nervous system tissue," so that's the first part of it, and the second part of it being is that these little pieces of fabric which were barely more than the size of the stain, the estimate was that the tissue which had gone onto the shirt was probably about the size of a grain of rice in each case, so a very small area of the shirt is cut out with that stain on it and that goes through this elution process or this beaker soak process and out of that comes the finding of the DNA of the deceased Christine Lundy and again, nobody else.

And the evidence of the experts was, and when I say "experts", I'm talking about Dr Vintiner and Dr Vennemann, who was the defence expert, is that it was high quality and high quantity. It wasn't a trace. So it had to come from

something like body tissue or blood and possibly mucous. So it was that which was the cornerstones of the Crown case and in my respectful submission, it is obvious from the trial record that by the time counsel addressed, and it's obvious from the closing addresses of both Crown counsel and defence counsel, and by the time of the Judge's summing up, that that was the core issue, and of course as the Court of Appeal pointed out, there was no contest on that aspect of the case because the Crown experts and the defence experts all agreed.

So to revert to where I started, which is the submission I make that my learned friend is overstating the effect of the mRNA evidence on the trial, that's why I say it.

**O'REGAN J:**

So does the Crown no longer contend for the mRNA evidence?

**MR MORGAN QC:**

Well, in my –

**O'REGAN J:**

I mean, if leave were given, would the Crown be seeking to effectively cross-appeal on that?

**MR MORGAN QC:**

My inclination is to say yes to that, Sir. I haven't really turned my mind to it at all. The one reservation, in hindsight, of course, is that it was complex, but of course, it became complex because of the challenge to it. There's an aspect of the case about the machine you use to do it and Professor Bustin was critical of the particular methodology, PCR analysis, polymer chain reaction, and it did make it very complicated and so that's the reservation I have that actually, was it a bit too complicated?

**WILLIAM YOUNG J:**

Cake wasn't worth the candle.

**MR MORGAN QC:**

But having said that, if one reads the handout that the trial Judge gave to the jury, it was, with respect to him, excellent in terms of drawing their attention to the bits that mattered. So they were given a great deal of help on the topic but actually, you can recognise the sense, with respect, of what the Judge said when he said to the jury, and he obviously recognised it, as I say, from that passage the Court of Appeal quoted, that actually, if you do put it to one side, you've still got the rest of it, which is why –

**O'REGAN J:**

And that's a pretty orthodox direction in a circumstantial case, isn't it?

**MR MORGAN QC:**

Yes, it was an orthodox direction, but I think particularly relevant in this case because of the way it's all sort of panned out and as I say, the whole notion of this being food chain central nervous system tissue emerged for the first time in the Privy Council in 2013 so in anticipation of a defence proceeding along those lines, the mRNA evidence was sought and there was a contest about it at trial, as you will have seen from the trial record. The defence case did argue that this could have been food chain central nervous system tissue and it relied on the Crown witness Ms Wictim from the United States who said "Well, out of the same elution, we did find these tiny fragments of DNA from animals but actually consistent with perhaps spatter from somebody cooking something like that".

**WILLIAM YOUNG J:**

So was there no other testing in relation to the balance of the shirt?

**MR MORGAN QC:**

No other testing in the sense that the whole shirt wasn't DNA tested.

**WILLIAM YOUNG J:**

But it was examined?

**MR MORGAN QC:**

The whole shirt was examined.

**WILLIAM YOUNG J:**

And there were some tape tests or something?

**MR MORGAN QC:**

Yes, so the whole shirt was examined under a microscope, this is the evidence of Mr Sutherland, and he, as you said, tape test – tapes from it which, from the front of the shirt, revealed blood spots or presumptive tests for blood which were found to be Amber Lundy's DNA and there was these two pieces of central nervous system tissue. That was that essential finding. But he examined the whole shirt, hence the significance, of course, that on these two areas, one on the sleeve, one on the chest, Mr Sutherland sees what looks to be a stain which he thinks is probably tissue which tests positive for blood, hence he decides to cut them out and of course, they reveal only this finding of the DNA of the deceased.

**WILLIAM YOUNG J:**

Would you expect blood in animal tissue that's been spattered on a shirt in the course of cooking? Was that addressed in evidence?

**MR MORGAN QC:**

I don't think it was ever addressed expressly in evidence. The whole notion – and of course, this – perhaps I could answer it this way, there was really no suggestion that this was tissue coming from cooking because it was, to use the words of the neuropathologists, "unfixed", which meant it hadn't been cooked. That's why it could be smeared into the fabric. It was obviously fresh. If the testing carried out by the likes of Dr Miller and particularly Dr du Plessis in the United Kingdom is that what does happen if you smear tiny quantities of brain tissue into fabric like this is that it dries very quickly and then you can't do it anymore. So it really had to be raw tissue to have got embedded in the fabric like that which again, this is all very factual, I appreciate, but all of these issues were explored in enormous detail. If this –

**WILLIAM YOUNG J:**

So just slipping onto a point of principle, the standard of proof on the application of the proviso, do you accept that it's sufficient if the appellate court is sure of guilt or does it have to be sure to a mathematical certainty, which I think is effectively the proposition Mr Eaton was saying?

**MR MORGAN QC:**

The former, Sir. There isn't a mathematical certainty. Sure of guilt is what the test is, that's what the authorities say, in my submission, and that's what the Court of Appeal said here.

**O'REGAN J:**

What do you say about the fair trial issue, the argument that the Court of Appeal conflated the two limbs?

**MR MORGAN QC:**

There, Sir, and contrary to what my learned friend says, I think we had to actually go back to the earlier part of the judgment, and it's not paragraph 382 at all, it's paragraph 365 because at 364, they say "In the end we have been left sure of Mr Lundy's guilt", and then they go on at 365 to address the fair trial issue and so you'll see there that they have actually been quite careful, in my submission, to ensure they're not conflating the two and they've recorded there the argument for my learned friend referring to *Wilde* and referring again to my learned friend's submissions which he's taken out of the Crown closing address and then the Court has at 373 referred to the Crown submission that this applicant had every opportunity of confronting, and did, in fact, challenge this evidence, and then they've gone on to deal with this issue from paragraph 374.

At 376, they say "We conclude however, that in a case where the issue is whether wrongly admitted evidence has made the trial unfair, the answer depends on an assessment of the significance the evidence wrongly admitted, in the context of the trial. That is the test applied in *Wilde*, and we apprehend

it is the test that we must apply having regard to its adoption by both the majority and minority judgments in *Howse*". So I make –

**O'REGAN J:**

But that's the significance of it to the conduct of the trial as opposed to the significance of it to the Crown case, isn't it?

**MR MORGAN QC:**

Absolutely.

**O'REGAN J:**

And I think Mr Eaton's saying "Well, they did the wrong one of those, not the right one".

**MR MORGAN QC:**

I just question whether they can be separated out like this. That being the test, as I say, they have turned their mind to the very topic you raise, Sir, where they say that "It is clear that in this context the strength of the prosecution case is to be considered not for the purpose of asking whether, had the impugned evidence not been called, there would nevertheless have been a conviction. Rather, the other prosecution evidence is relevant to the question of whether the evidence would have assumed such importance its wrongful admission could be said to have made the trial unfair". So in my submission, they have actually focused on the right issue there.

**WILLIAM YOUNG J:**

One other point, Mr Eaton has made quite a good deal of the change of stance, I guess, by the Crown and also by the Courts in relation to the significance of the messenger RNA evidence and on the face of it, it is a little odd that the evidence is treated in the Court of Appeal judgment as being not immaterial but unnecessary, whereas previously, it had been such a hotly-contested issue all the way through.

**MR MORGAN QC:**

Yes, indeed.

**WILLIAM YOUNG J:**

So what do you say about that?

**MR MORGAN QC:**

What I say about that is this, that what happened pre-trial, and words of His Honour Justice Kós and the words of the Court of Appeal are a bit irrelevant, yes, that was the argument then that this is material evidence because of course, then we were anticipating a defence case which was going to be that this was food chain. So by the time we actually get to trial and the challenge is mounted and we've heard what Dr Sijen actually says, which, you know, in truth, wasn't particularly compelling, the sort of "More probable but I can't tell you how more probable", by the time it got to the closing addresses and the Judge's summing up, it just no longer had that significance and I do urge the Court, in considering this issue, see what defence counsel said on the topic, and in fact, both closing addresses, because it had just sort of dropped away in terms of true trial significance.

So yes, indeed, I argued in the Court of Appeal that it would have been substantially helpful because that's the test, it was a piece of evidence, like all the rest of the pieces of evidence, to argue that notwithstanding the criticisms of it and notwithstanding that I accept it was a bit complicated, it was still admissible, but it doesn't get away from, in my submission, the way in which the Crown closing address, the defence closing address, and importantly, the Judge's summing up treat it at that stage, which was effectively to say "Look, it's a piece of evidence there, make of it what you will, but importantly, you've got to go on and consider the rest of the case, in particular, the undisputed central nervous system tissue, the undisputed DNA, and the other evidence", because this case was not just about these three bits of evidence, there was all the rest of it as well.

**WILLIAM YOUNG J:**

Okay. Is there anything else you want to say?

**MR MORGAN QC:**

Can I just check my notes?

**WILLIAM YOUNG J:**

Sure.

**MR MORGAN QC:**

My learned friend, in his argument, attracted my attention to a number of points. I don't want to get into the facts too greatly. I would like to just touch on the fair trial thing because much is made of the resources that the defence had to put into this and I do accept that there were resources put into it but again, it was just part of the preparation. There was a lot of resources that the defence put into the IHC as well which they in fact deployed at trial but in support of the Crown case. But in my submission, it's wrong to argue that the defence was distracted by this in a case where the Crown changed its stance a matter of days before trial. I resist that entirely.

**WILLIAM YOUNG J:**

I think it's referred to in the Court of Appeal judgment. Wasn't there a general notice given about six months before trial?

**MR MORGAN QC:**

Absolutely, and it's actually recorded in His Honour Justice Kós' decision that the Crown is no longer maintaining –

**WILLIAM YOUNG J:**

A 7 o'clock time of death?

**MR MORGAN QC:**

– the early evening – so the few days before trial comes from a query about whether the Crown was going to continue to argue there had been

manipulation in the computer. That's what that comes from. But the defence had been on notice for months that this was not, the early evening fast drive et cetera was, I mean, I can't say that it was taken off the table but they were on notice for months that the entire night was at issue. And again, it's said that this topic is all a distraction. The mRNA evidence was the subject of thorough examination in 2014 before Justice Kós and more examination by the defence in the months leading up to trial. They already had Professor Bustin on board by the time of the Court of Appeal hearing. So it's not as if they had to sort of drop everything and run around at the last minute to sort this issue. It was very much at the forefront of everybody's minds for months prior to the trial and, in fact, with great respect, defence counsel used it very effectively to sort of badger the Crown about how the Crown's sort of relying on unreliable science.

**O'REGAN J:**

What do you say to the argument that the defence case would have been argued differently if mRNA had never been there there would have been a much greater emphasis on the food theory?

**MR MORGAN QC:**

It wasn't arguing differently, they argued it exactly the same way. It was a part of the defence case that there was a possibility that this was foodstuff from the food chain. They produced a photograph of a pork chop as part of the defence case to show that you could buy a pork chop in a butchery with central nervous system tissue in it. There's a passage that was quoted in the Court of Appeal judgment from defence counsel's closing address where he emphasised this point that it could have been from the food chain, he's a cook, that relying on the evidence that the Crown called of animal DNA in the eluted substance. So they did make it part of the defence case. The defence case had two limbs. I accept that it wasn't pursued to the same extent as the defence case which was that it actually is the deceased Christine Lundy's brain tissue, but it got there inadvertently because of the way the police conducted their investigation or because there was an error in the laboratory somewhere, but the defence case was quite clearly on those two limbs couple

with, I guess, the third limb, which was that it's impossible anyway because of the timing issue.

**WILLIAM YOUNG J:**

Can I just ask you one question, just so that I understand the stain evidence? The two pieces of shirt were cut out because there was on each of them a visible stain of what appeared to be body tissue?

**MR MORGAN QC:**

Yes, and blood.

**WILLIAM YOUNG J:**

And blood.

**MR MORGAN QC:**

Or it gave a reaction to blood, I think it a better way of putting it.

**WILLIAM YOUNG J:**

The process of elution picks up any DNA that would be on that piece of shirt?

**MR MORGAN QC:**

Yes.

**WILLIAM YOUNG J:**

Irrespective of whether it's associated with the stain or not?

**MR MORGAN QC:**

Yes.

**WILLIAM YOUNG J:**

The conclusion that the tissue was CNS was based in part on visual inspection?

**MR MORGAN QC:**

I think all the neuropathologists would say you can't just visually inspect, you –

**WILLIAM YOUNG J:**

Yes, but it looked like CNS tissue? Or did they not say that?

**MR MORGAN QC:**

They would that, "We can say that when we look at it down a microscope with stains but nobody else can."

**WILLIAM YOUNG J:**

And partly the IHC test?

**MR MORGAN QC:**

Yes. Well, the two are, it works together. You need to put the antibodies with it to get some reactions and when you look at the reactions it's not just whether it reacts or not, ie it went blue or red, the antibodies react with the structures of the cell and you can see the pattern of the cell structure because of how the antibodies have reacted, and that's what they look for.

**WILLIAM YOUNG J:**

Okay, well, I think I'd better ask Mr Eaton to reply because otherwise we won't finish. Thank you, Mr Morgan.

**MR MORGAN QC:**

Just as I look at my notes, there was one other topic, if I may?

**WILLIAM YOUNG J:**

Oh, yes, all right.

**MR MORGAN QC:**

And it was just the issue of the dab slide, you might remember that my learned friend spoke of the dab slide and how that was different and it meant it could be animal tissue. I just want to make the point that that was very much a trial issue and ultimately it too fell away, one of the defence experts, Professor Smith, said, "It's irrelevant." Those are my submissions.

**WILLIAM YOUNG J:**

Thank you. Mr Eaton?

**MR EATON QC:**

Sir, just on that last exchange regarding being able to tell this was CNS tissue. The only identification was through IHC and part of the argument in the Court of Appeal was that they are searching only for CNS tissue and they're using antibodies that are not specific to a particular tissue, and that's part of the critique about the general IHC process. My friend has said just a minute ago that the mRNA evidence from Dr Sijen was not particularly compelling and all I can say in response to that is you would not gather that from the closing address. It was admitted cautiously by Justice Kós because it had been expressed conservatively and I think that impressed the Court of Appeal majority as well. At page 539 of the Court of Appeal case on appeal, they went through the evidence over about three pages and what tests had been carried out and said, "It demonstrates, does it not, that the NFI's conclusion that the outcome of human brain observed and the probability it's human brain than the brains of the species tested is an extremely conservative way of describing their outcome". So my friend actually was playing on it saying it's a lot better than they're saying as opposed to making a concession that it was not particularly compelling.

My friend said "Look, the DNA and the CNS were the cornerstones of the Crown case" and they were until the mRNA came onto the table. Can I just use the example of what happened in *Howse* of what the minority said in *Howse* because there, they said, this is at paragraph 62 of *Howse*, "It may well be that the evidence available to the Crown about the circumstances of the murder pointed strongly to the appellant and that would have been enough, by itself, to overcome this line of defence. But counsel for the Crown decided to go further and to add to it. He devised a strategy to show that the appellant, rather than the suspect, was the violent one and that he, rather than she, had a motive". That was the strategy that the Crown put into effect at trial. And of course, that's what happens here. If the Crown had deliberately embarked on a strategy, it would have become somewhat artificial

and unfair to then say “Well, you chose that strategy but now that you’ve realised in the aftermath of the Court of Appeal judgment it was flawed because it was bad science, you’re stuck with it and we won’t tolerate the excuses to say it didn’t really matter”.

Just a couple of other matters I wanted to mention. 167 of the Court of Appeal judgment records that du Plessis said when he was looking down his microscope and identifying CNS tissue that he could also see skin flakes, so when my friend said, “This is the only thing found”, he’d talked about finding skin flakes as well.

There’s been reference to the only DNA on the shirt coming from the area of these cut-out spots and the Court now knows from the evidence I’ve referred to that the area of the cut is bigger than the stain and it doesn’t tell you where it’s come from within the cut material. But the point being in terms of the real significance of that, the rest of the shirt was never tested for DNA, so we simply don’t know the answer as to whether that makes it alarming or extraordinary coincidence or not.

And the passage on fairness is actually referred to in the judgment, that I’ve referred to in my original submissions, it’s at [375] and it came from Her Honour Chief Justice Elias and Justice Glazebrook in *Guy v R* [2014] NZSC 165, [2015] 1 NZLR 315, it’s at 375 of the Court of Appeal decision, “The threshold on which it may be concluded that a trial is unfair is set at a high level; the operation of the proviso is not to be stultified. But in considering whether a trial is indeed fair, the inquiry is on the right to fair trial itself, not the proviso question whether the appellate court is satisfied of the guilt of the accused on the basis of the evidence.” And that’s the strong indication of the importance of delineating between what our assessment of guilt is when you take away the evidence and the separate consideration about whether the trial was fair, which is all about what influence, what significance did this have in the context of the way this trial was run.

**O'REGAN J:**

But, I mean, to some extent that has to also, I'd say, well – I mean, if it's a completely trivial bit of evidence –

**MR EATON QC:**

Yes, of course...

**O'REGAN J:**

– you would say, “Look, it didn't prove anything so who cares?”

**MR EATON QC:**

That's right. What we do see thought, when we review these cases, is, the High Court of Australia in *Wilde* was a split decision, the Privy Council in *Howse* is a split decision. Hard to apply in hindsight for an appellate court the significance or otherwise. In *Howse*, of course it was perhaps a little bit easier because he had confessed and what he had said was, “This is the angle of the stab wounds and this is where one of the girls moved,” and that was proved correct by the pathology and by the forensic examination of the scene, and the Court said, “Well, there's no way in the world anyone could have known unless you were the offender.” That was direct evidence. We're talking about inferences here based on science and what inferences you drawn, which is a different category and a far higher risk category.

**O'REGAN J:**

Yes, but on your argument they should have been, “But a guilty man is still entitled to a fair trial and therefore,” I mean...

**MR EATON QC:**

Well, that's what the minority said.

**O'REGAN J:**

Well, you would argue they were wrong, wouldn't you, the majority –

**MR EATON QC:**

Well, I would support the minority's view in that case. It was a three/two split. But it just shows the difficulty in application. May it please the Court.

**WILLIAM YOUNG J:**

Thank you. We'll take time to consider our judgment and deliver it in writing to the Court.

**COURT ADJOURNS: 11.16 AM**