

RESUMING 11.40 A.M.

MR BORICK: I hope I've correctly identified the issue where the jury, in the light of the new material, might have a reasonable doubt about proof of the element of the crime charged.

I think basically when I read my friend's outline overnight and this morning that's the issue for your Honour.

HIS HONOUR: I'm sorry, the issue for me?

MR BORICK: Is whether a jury, in the light of the new material, may have a reasonable doubt about the proof of the elements of the crime charged.

And the second major proposition we have advanced is that the issue of expertise is to be decided according to the relevant legal principles which are well-known to all of us, and that that does not depend on the resolution of the scientific controversy. In other words, I'm submitting to your Honour that you can't go through a process of resolving the scientific controversy and then go to the legal principles. You go to whether they have achieved that by their training study and experience.

That's all I really want to say about that because the principles are clear, and your Honour knows what the issues are. My friend is arguing that they are not experts and we say they are.

HIS HONOUR: Do you say I can't consider their evidence in determining whether they are experts?

MR BORICK: You consider their evidence. They are claiming that, because of their scientific - particularly Eleni Papadopoulos, because of her background as a physicist, she has an understanding of the basic sciences involved in this case and that she is able to develop an opinion and provide an opinion to the court on the issue of pathogenesis; that is, not only the cause of AIDS, if you like, but the issue as to whether HIV has ever been isolated or purified. I'm sure I don't need to take your Honour through that.



It's very clear what the difference between them is.

Our submission is that they have established themselves as an expert, that there is a scientific controversy and that that controversy can't be settled by your Honour accepting that the other seven or eight witnesses called all say that in their opinion Papadopoulos and Turner are not experts.

HIS HONOUR: And in their opinion there is no controversy as I understand it.

MR BORICK: That's so. If you accepted those experts, then there is that controversy. Going back to the first point, it would then be a matter that could be put to a jury.

I think, your Honour, probably we are just looking from a practical point of view as lawyers. If there were to be a retrial then the prosecution would be put on notice that they have to prove that HIV exists and it causes AIDS. Professor McDonald would be called to give his evidence and Professor Gordon would have to be called. Professor McDonald would be cross-examined in much the way he was this morning and that would be before the jury. And if defence counsel were addressing the jury they would say 'Ladies and gentlemen, on the question of HIV causing AIDS that's our case and it's for you, not for his Honour or anybody else, you the jury will decide this'.

Obviously it would have to be put to Professor McDonald in cross-examination what the views of the Perth group were. Depending upon his answers, but I would envisage then that the defence would call the Perth group, they may call others like Duesberg or Mullis, it's hard to look ahead, but at the end of the day in the jury trial the jury would have been made very well aware that there is a controversy, they would be made very well aware of other experts, the prosecution witnesses would say they shouldn't take any notice of the Perth group. Fundamentally that's an issue for the jury not for your Honour. That's why my starting point

is whether it could make a difference, the jury  
deliberating is an important one.

The dissident views I've summarised by Professor  
McDonald at pages 1376-1377. I'm not going to read them  
out. The two major ones are the very strict view held  
by the Perth group; the purification issue and the view  
held by Mullis and Duesberg that HIV does not cause  
AIDS. They are not contradictory because the Perth  
group and those who support them are saying you can't  
say that HIV causes AIDS because you haven't  
scientifically isolated HIV.

By the way I make this clear now: we are not saying,  
as I understand it, HIV does not exist. The position  
has always been HIV has not been scientifically proven  
to exist.

So they are the various dissident views. I want to  
come now to some of the ways in which it is said that  
one can prove that retrovirus known as HIV exists. I  
think the best way for me to present my argument on this  
is to take you to Dr Gallo's evidence in relation to two  
specific matters.

At p.1293 he is in cross-examination and I take you  
to line 30:

'To take the first four points that you made in your  
report to the court in combination ... 119 patients that  
we -'

Then I went to p.1294:

'How many was it. A. Well, I think we isolated in  
almost every patient with AIDS that ... than the healthy  
population.'

He went on to say at 1302:

'It depends on the ratio of the virus to the cells -'  
I've moved to a different topic there. Can I take you  
back to his evidence in relation to the denominator.

Has your Honour got his various papers there?

HIS HONOUR: Yes. Give me the exhibit numbers, yes.

MR BORICK: If your Honour could have the papers in  
front of you.



HIS HONOUR:	Which ones are we talking?	1
MR BORICK:	The Gallo papers.	2
HIS HONOUR:	Do they have an exhibit number? That	3
	would help me. P86.	4
MR BORICK:	P86. If you go to p.502 of the second	5
	science paper. The number tested adds up to 48.	6
HIS HONOUR:	18 -	7
MR BORICK:	3, 3, 13, 10 and 1. That's where you get	8
	the 48 from, and the number tested is the next column	9
	which gives you 119. Now the figures down the bottom -	10
HIS HONOUR:	Where do you get the figure? By adding	11
	them up?	12
MR BORICK:	Yes. So the clinically normal	13
	heterosexual group, that's where you get that figure.	14
	That produces the figure of 40.3% which we put to him.	15
	We were right in what we put to Dr Gallo. And his	16
	response was typical of him, he was aggressive, that's	17
	his style but he was very aggressive and this is his	18
	papers and he couldn't accept that the denominator which	19
	we were referring to was correct. Quite what he meant	20
	at p.1294 when he said:	21
	'You are right, judge, I don't accept the denominator	22
	... wouldn't save the cause.'	23
	I don't know what your Honour reads into that what he	24
	meant. But if he is meaning to say it doesn't represent	25
	an argument that HIV causes AIDS, which would really	26
	represent our position - so, that's his evidence in	27
	relation to the actual figures. And then we turn to his	28
	evidence about the electron micrographs. If your Honour	29
	goes to p.1302 at line 23:	30
	'In May 1984 did the group that you were with ... to	31
	publish any electron micrographs.'	32
	Over the page, I'll take you to 1304, line 20:	33
	'In the first of the two papers that I've taken you to	34
	... that there was a laboratory contamination.'	35
	If you look at the papers again, if you go to p.504 of	36
	the document P86.	37
HIS HONOUR:	Yes.	38

MR BORICK: It's called figure 4 and the top row is  
HTLV1, the second row is HTLV2 and then the third,  
that's the bottom row, is patients described as  
presenting with AIDS.

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MS MCDONALD: Those three photographs, which are not 1  
 photographs but he was claiming them to be, and 2  
 subsequently you had understood him to be saying well, 3  
 there was only one mistake, but in fact it was the 4  
 three, and it was those three that he was referring to. 5  
 Now associated with that I took you through the 6  
 evidence where we said we published electron micrographs 7  
 of RF, RF as a person and he was using those 8  
 photographs, as I understand him, to prove his case. RF 9  
 as a patient is mentioned only in the fourth paper at 10  
 497 to 500. Table 2 on p.499 of the text on detection, 11  
 isolation and continuous production of psychopathic 12  
 retroviruses, HTL VL3, from patients with AIDS and pre 13  
 AIDS. That table shows the column headed 'Electron 14  
 microscopy' and the entry for RF is ND. 15

HIS HONOUR: Which page are you looking at now? 16

MR BORICK: P.499. ND is not defined in the legend 17  
 in table 2 but in the legend in table 1, p.498, about 18  
 eight lines up from the bottom, ND means not done. So 19  
 if ND in this paper means not done, then RF, electron 20  
 microscopy, was not done. I will take you back to his 21  
 evidence at 1302: 22  
 'We also published electron micrographs of RF' 23  
 And further down, at 25: 24  
 'Did you listen to anything I said? Are you listening 25  
 ... at RF, look at the paper, you will see RF.' 26  
 Further down at 32 we showed electron micrographs. I 27  
 suppose I was listening to him but I didn't know then, 28  
 when he was in a sense yelling at me, that RF - 29  
 photograph, but that's the fact of the matter. 30

So what I'm putting to your Honour is, those two 31  
 examples I have given you about Dr Gallo you should 32  
 treat him with the greatest of caution. He didn't give 33  
 you straight answers in relation to the inquiry that 34  
 went on for nine years, bullying his way throughout, his 35  
 way of doing things. 36

I know your Honour may well have a different view 37  
 about his approach to the oath but that proved very 38



strongly that he knew that the oath was important, 1  
whether he would swear or affirm. He must have known in 2  
giving his background knowledge that there is nothing 3  
different between the United States or anywhere else as 4  
to taking of the oath. It was, at the very least, a 5  
demonstration of a cavalier approach and when you 6  
combine that with the examples I've just given you where 7  
he has just got it wrong, Gallo should be treated with 8  
the greatest of caution, and that of course means that 9  
when you look at the issue of Gallo you are really 10  
looking at the person who is supposed, with Montagnier, 11  
and they thought about that between themselves, but he 12  
is the founder of all this and you see people 13  
continually going back to say 'Well here's the start and 14  
here's what we are relying on'. A passage in Dr Dax's 15  
evidence, which she did, she specifically relied on 16  
Montagnier and, by implication, on Gallo, and I, of 17  
course, am acutely aware that some of the witnesses have 18  
said 'times have changed, things have moved on' and all 19  
the rest of it, but the foundation for the whole of what 20  
Professor McDonald described this morning as the notion 21  
- I underline that word, it's his word - the notion that 22  
HIV causes AIDS, stems from the work of Montagnier and 23  
if Gallo and the foundation was flawed then the people 24  
who come along now and over the years who have argued 25  
that it should be looked at much more carefully, in 26  
other words there is a controversy, well then they 27  
should be taken seriously, in my submission. 28

I mentioned Dr Elizabeth Dax and Dr Dax did not 29  
claim expertise in any area other than tests for HIV, 30  
that was at transcript 855, she said that there were 31  
very few ELISA's used in Australia any more, transcript 32  
856. That statement is inconsistent with the evidence 33  
of all the other witnesses and just for example, 34  
Professor French at 793. All of them said that the 35  
ELIZA is still being used. Obviously it was still being 36  
used in 1997 when Parenzee was being tested, and the 37  
surprising proposition put to you by Dr Dax, who is 38

regarded as the expert in this area, is that very few  
ELISA's are used in Australia any more, and that is of  
significance when you find that the prosecution experts  
are not all speaking with one voice on a very important  
issue.

One would have thought that if the Perth Group of  
Australia were out of touch, so out of line with all  
scientific thinking that it would be been very easy to  
dispose of them with almost one voice but it didn't. I  
know my friend says that she called all these people  
because there are different areas of expertise involved  
but certainly they did, each of them, from time to time  
say they are not experts, for example they all said they  
were not experts in electron microscopy, for that matter  
so did the defence experts. And there's a submission I  
want to make on microscopy, while I'm thinking about it  
now, that is you really haven't got any evidence at all  
on electron microscopy.

People have told you about photographs, we should go  
back to what would happen if this were a homicide trial  
and you were looking at photographs of a deceased, it  
would be an absolute requirement of any photograph that  
came along that you would need to have explained who  
took it, when it was taken, what it was taken of, and  
you'd look for what I call, in a broad sense, the  
source. Not one single photograph that has been put to  
your Honour has the source identified. Dr Dax you will  
recall said she couldn't remember whether she had seen  
it, Dr Dwyer said he could remember seeing some words  
from Semens but he couldn't remember where he had seen  
them, but overall you ought not to, in my submission, as  
the judge in this case or any of us as lawyers, try to  
interpret these photographs that were put before you  
because we haven't got any evidence, we don't know what  
they are supposed to mean.

Professor Cooper, he did not claim expertise in  
either virology or the HIV test kit results. Professor  
Kaldor, his evidence depends upon the accuracy of the



various test kits that were used over the relevant  
period of time, and Professor French acknowledged that  
AIDS is caused by factors in addition to HIV and those  
factors have not been established.

I refer to the mathematical proposition that I put  
to Professor McDonald this morning,  $H + X = A$ ,  
where H means HIV and A can mean CD4 cell depletion or  
AIDS. There can be no doubt on the evidence from the  
Rodriguez Study that  $X = 95$  - if you took 100 as the  
mean -  $X = 95$ . So as a matter of putting a case to  
a jury, if your Honour were to put yourself in the  
position of defence counsel and you had that sort of  
concept you could put it to the jury as something they  
could easily understand. You've got all these factors  
which can cause AIDS but 95 of them you don't know what  
they are. It's just supposition. And to go on from  
there to make the statement that 'In my opinion' - put  
in inverted commas - 'In my opinion, HIV causes AIDS',  
without knowing how or why, is an issue which would be  
put to a jury and a jury would have to make their  
assessment of that and could make an assessment of that.  
They are not being asked there, in that situation, to  
look at some of the very complex issues we have had to  
try to get our heads around in this case. They can look  
at something that's very straightforward and very easy  
to grasp.

I'm not going to take your Honour through the  
comparative study -

HIS HONOUR: It's your chart, comparative chart.

MR BORICK: Yes, chart. It speaks for itself, and we  
have highlighted some of the differences, but there is  
just one answer I'd take you to, it's p.13, item 31 'It  
was determined ... and all other RNA's.'  
And that was accepted by French. But it was Gallo's  
answer which is interesting, further to my submission to  
you about treading carefully. His answer was:  
'Well, you do do that but the answer is really ... want  
it very much but of course the answer is no.'

That's at p.1291. That's basically one of the most  
unscientific answers I've heard from a scientist, ever.

The diagnosis of HIV in 1997, and we have got the  
specific example of our client in this case, it was the  
positive ELISA, a Western Blot indicating a reaction,  
the IMSV print-out that your Honour is familiar with,  
that's the Higgins document, viral load and CD4 cell  
counts. You've heard enough to know precisely what our  
position on ELISA and Western Blot are and therefore I  
don't need to go through that now. You know what our  
position is on CD4 cell counts and you know what our  
position is on viral load and your Honour will recall  
the figures that we put to each of the witnesses, that  
Turner referred to, showing they are just all over the  
place. So you know our position on all of those and in  
our submission no unique genetic sequence has ever been  
produced to this court.

What I am going to do now, without reading out a  
lot, is to just give you references to where the various  
witnesses have referred to genetic sequence, and I'm  
going to refer to just some passages in it but I'll be  
able to provide you later today with a copy of the  
document I'm holding where I have pulled the relevant  
pages together. I'm sorry I just didn't have it ready  
before.

Cooper, at 706, was cross-examined about the gene  
bank at Los Alamos and it was put to him that the  
director, Mr Foley, said that the HIV genome is a Tly  
(a) RNA which originated from material which was not  
purified, and he said 'I'm not aware of that'.

Professor French at p.789 says:

'In my mind it has definitely been resolved, HIV is a  
... to the virus that don't occur in any other virus.'  
P.791 he has referred to:

'The RNA is the sequence of the viral RNA known to  
measure the amount of viral RNA.'

And at the same page, line 15:



'We can also use that complementary DNA to seek ...  
parts of the viral genome.'

A bit further down the page at 28:

'So we are interested ... transcriptase enzymer.'

Dax at p.897 said:

'You take that virus, treat it and sequence it ...  
related to other viruses.'

And at 918 she said:

'I have read this several times over, this gold standard  
... call it isolation of the virus, the gold standard.'

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HIS HONOUR:	What page is that?	1
MR BORICK:	P.919. She says there:	2
	'I think the gold standard these days is the genomic	3
	sequence.'	4
	Certainly she didn't understand the gold standard, now	5
	she says she thinks it was the genomic sequence.	6
	Dr Dwyer, at p.959, mentioned the genetic sequences.	7
	At line 25, he said:	8
	'Rather than detecting the whole ... that is unique to	9
	the virus.'	10
	At p.960, it was referred to him the genomes are stored	11
	in a database at Los Alamos. At that page also, he was	12
	asked:	13
	'With a HIV genome, are there ... it certainly is	14
	complex.'	15
	At p.961:	16
	'If you go across the whole genetic material ...	17
	and the virus can be taken very quickly.'	18
	Further down that page:	19
	'It can vary within one person. Even within the cell of	20
	a person you can see different HIV strains.'	21
	At p.972, cross-examination, I put to him:	22
	'You referred to a number of occasions ... but there are	23
	two separate sequences.'	24
	Further down that page, he said he was not aware of p24	25
	being found in breast cancer:	26
	'I'm aware of HIV-like sequences being found in breast	27
	cancer.'	28
	Then Professor Gordon, at p.1027, said:	29
	'We know that not every HIV virus has exactly the same	30
	sequence.'	31
	At p.1036:	32
	'So, for example, some endogenous retrovirus ...	33
	that's in the literature.'	34
	At p.1092, I asked him:	35
	'Can we look at a sequence. Can we see it on paper ...	36
	look at any article you are referring to.'	37
	At p.1093:	38