

SULAN J	1
NO.65/2006	2
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R V ANDRE CHAD PARENZEE	4
	5
WEDNESDAY, 31 JANUARY 2007	6
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RESUMING 10.11 A.M.	8
WITNESS NOT PRESENT	9
HIS HONOUR: I understand, Mr Borick, that you have	10
been served with some additional material?	11
MR BORICK: Yes, as I walked in, ten minutes ago, I	12
got a statement from a Dr Dwyer, an additional statement	13
from a Professor Margaret French with some other	14
documentary material with that, and I am told that	15
during the course of today, we are going to get a	16
statement from a Professor Dax. Also, from a brief	17
discussion I had with Ms McDonald, it looks as though	18
the batting order of the prosecution which I had	19
anticipated is not going to happen. Perhaps she could	20
explain that to you. I would certainly want at least	21
until 11 o'clock to get a bit of a feel about what this	22
new information is at the very least. That is the	23
application at the moment.	24
MS MCDONALD: I obviously don't oppose that	25
application, but I can just indicate to your Honour	26

where I see things progressing from here. 27

HIS HONOUR: That's the reason I came onto the bench; 28

it was not because I wasn't sympathetic to giving some 29

time, but I am concerned about the state of progress, 30

because I have set aside until the end of next week, but 31

I have a very, very tight program and I think this 32

matter has got to a point where it really needs to be 33

dealt with, and I can't keep just adjourning it and 34

having a block here and a block there, because it has 35

been quite some time now. I really need to get a feel 36

for it, because I'm not sure that the Chief Justice will 37

necessarily welcome a visit from me to tell him that I 38

need more time, but if that is necessary, the sooner I	1
do, the better.	2
MS MCDONALD: I don't think your Honour will have to.	3
The way I see things progressing from here is, one way	4
or another, I finish the cross-examination of	5
Ms Papadopoulos today. Practically I can cross-examine	6
forever, but I have got to make some judgment calls	7
about that, but my goal is to finish today so we can	8
move on. I don't think Dr Turner will be very long at	9
all. He is a discrete topic. I am only proposing to	10
cross-examine him about what he gave evidence-in-chief	11
about. I would have thought at the most half a day.	12
Then tomorrow afternoon, we have only one witness giving	13
evidence by video link-up, the rest are coming, that is	14
Dr Cooper. He is booked in for tomorrow afternoon.	15
That is the only window of opportunity he has. He is	16
back in Thailand after that. His evidence won't be	17
particularly lengthy. There are a couple of discrete	18
topics to deal with. On Friday we will go to Professor	19
French, who will be one of the more lengthy witnesses.	20
Then we have a fairly tight timetable for the rest of	21
the following week.	22
HIS HONOUR: What about addresses?	23
MS MCDONALD: At this stage, my last witness is on	24
Thursday. That is another witness that won't be very	25
long. I would have thought at the very least we would	26

have all of Friday for addresses and maybe part of 27
Thursday. 28

MR BORICK: We haven't got Friday, have we? 29

HIS HONOUR: I don't think so. I think Friday I have 30
got another matter, I think you are right, Mr Borick. 31
Friday I have got another matter, so unless that matter 32
resolves, I can't give you Friday. 33

MR BORICK: Perhaps we could continue this discussion 34
at the end of the day. We might be in a better position 35
to see how we are going. 36

HIS HONOUR: Why don't you both give it some thought. 37
The other thing, Ms McDonald, is I am going to be 38

assisted by both of you if I can have some written 1
submissions rather than just an oral submission from the 2
bar table, because the evidence to date has been quite 3
extensive and, frankly, some of the material needs to be 4
analysed in a lot of detail. It will help me if some of 5
it, the parts that seem to be relevant, can be 6
identified. I don't think the legal principles are 7
going to take very long. I suspect there won't be an 8
enormous difference between you about the legal 9
principles that need to be applied, but even if there 10
is, that argument is not going to take much time, but 11
the practical questions might take a little bit of time 12
to work through. 13

MS MCDONALD: I agree with your Honour. It is 14
certainly the sort of case that lends itself towards 15
some sort of written document rather than us standing on 16
our feet giving your Honour copious transcript 17
references and exhibit numbers and the like. The 18
difficulty we are coming into is time frames. 19

HIS HONOUR: Anyway, we will just have to sort that 20
out. I don't ask for anything at the moment. Perhaps 21
you can give some thought to that. 22

Now, the video link-up is going to be on Thursday 23
afternoon, is it? 24

MS MCDONALD: Yes. 25

HIS HONOUR: Do we need to make some arrangements 26

here?	27
MS MCDONALD: Yes, that's what I needed to speak to	28
your Honour's associate about.	29
HIS HONOUR: Thursday afternoon is when you need it?	30
MS MCDONALD: Yes.	31
HIS HONOUR: You can speak to my associate about it.	32
Mr Borick, you would say about an hour, would you?	33
MR BORICK: Yes.	34
HIS HONOUR: 11.30, or do you want me to come earlier	35
than that? I am in your hands.	36
MR BORICK: Let's make it 11.15.	37
HIS HONOUR: If you require more time, can you let my	38

associate know.	1
MR BORICK: Straightaway, yes.	2
HIS HONOUR: And if you need another quarter of an	3
hour or so, we needn't get back together.	4
MR BORICK: A thought just came to mind when you were	5
talking then. Have you got the latest statement from	6
Professor McDonald?	7
HIS HONOUR: I received a statement late last week	8
from Professor McDonald in which he comments on some of	9
the material that has been presented.	10
MR BORICK: That's right, yes. It might be, as this	11
case progresses, that your Honour might be able to give	12
us an indication of areas where you are having some	13
difficulty understanding it. There are lots of areas	14
I'm having difficulty understanding, and if you could,	15
if you didn't mind indicating those and we will do our	16
best to clarify them.	17
HIS HONOUR: I will certainly try and do that.	18
ADJOURNED 10.19 A.M.	19
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E. PAPADOPULOS-ELEOPULOS XXN

RESUMING 11.25 A.M.	1
+ELENI PAPADOPULOS-ELEOPULOS CONTINUING	2
+CROSS-EXAMINATION BY MS MCDONALD	3
Q. Ms Papadopoulos I just want to take you back to	4
something you said in evidence yesterday at p.439, line	5
26. If you just listen to this. I asked you this	6
question. 'Let me ask you the same sort of question	7
from a different perspective. Can you name any virus	8
that has ever been isolated exactly according to the	9
rules that you have put to this court' and your answer	10
was 'There are many retroviruses, I'm interested in	11
retroviruses, and there have been many who have been' -	12
question 'Tell us', your answer 'For example the	13
rous-sarcoma virus. They have been purified. There are	14
plenty of electromicrographs that show that. The	15
papilloma virus has been purified. There are many which	16
have been purified. There are - 'plenty' I think it's	17
supposed to be ' - electromicrographs to show their	18
purification'. Do you agree that is your evidence	19
yesterday.	20
A. Yes.	21
Q. When I asked you about viruses you said you weren't	22
interested in viruses but were interested retroviruses.	23
A. Especially retroviruses, HIV.	24
Q. I asked you to give some examples of retroviruses that	25
you say have been purified the way you say HIV needs to	26

be before it can be identified as a separate virus.	27
A. Yes.	28
Q. Papilloma virus isn't a retrovirus.	29
A. I didn't say it. You're taking it out of context.	30
First I started with rous-sarcoma virus which is a	31
retrovirus and then I said 'other viruses', and one of	32
them is papilloma virus, and I said there are even many	33
others. I can give you books which have	34
electromicrographs showing purification of viruses. I	35
never said the papilloma virus was a retrovirus.	36
Q. I asked you yesterday, 'For example, is there	37
retroviruses that have been purified in the way you	38

suggest that HIV should be purified other than	1
rous-sarcoma. Can you tell us any other retroviruses'.	2
A. You didn't say other than rous-sarcoma.	3
Q. I'm saying today, other than rous-sarcoma can you tell	4
us any retroviruses that have been purified in the way	5
you suggest that HIV should be purified.	6
A. Murine leukaemia virus was purified by Ettiene DeHarven,	7
pathologist specialising in electromicroscopy of	8
retroviruses and, at present, one of the best supporters	9
on our claim that HIV has not been purified and thus has	10
not been proven to exist.	11
Q. Any other retroviruses that you say have been purified	12
in the way that HIV have been purified -	13
A. I have a lot of books, I can give you a few but I give	14
you two of them. In fact, one of them, I can't remember	15
which one, it was purified by Barre-Sinoussi, the	16
principal author or the Montagnier 1983 paper which was	17
said to have proven the existence of HIV and to be one	18
of the landmarks of medical research in the 20th	19
century. 10 years before she published that paper, in	20
1973, she published papers on retrovirus purification	21
with electromicrographs and she says there you cannot	22
claim purification unless you show that the material has	23
nothing in it but particles with the same morphological	24
characteristics. I'll give you the paper if you want.	25
It was published in Spectre in 1973.	26

Q. I want to take you back now to the studies we were 27
dealing with yesterday. If the witness could have A8. 28
We're going to slide 30 and you told us that P68 was the 29
article that you relied on for this slide. I think 30
that's just been put in front of you. 31
A. Yes. 32
Q. Yesterday we were looking at p.811. 33
A. Yes. 34
HIS HONOUR: Which document are you referring to? 35
MS MCDONALD: Sorry I said P30, I think it's P36. 36
XXN 37
Q. We dealt with the heading in the right-hand column 38

	'Efficiency of Male to Female and Female to Male	1
	Transmission'. Do you see that, and then we continued	2
	down and you see the heading 'Discussion'.	3
A.	Yes.	4
Q.	They say 'We observed a rate of female to male	5
	transmission of 12% and a rate of male to female	6
	transmission of 20%. Since specific characteristics	7
	such as the proportion of the index cases in the late	8
	stages of the disease and the proportion of couples	9
	engaging in high risk sexual practices may vary	10
	considerably according to the study sample, crude rates	11
	observed in other studies may differ'. That's what it	12
	says there.	13
A.	Yes.	14
Q.	So the authors in this study report and have indicated a	15
	12% rate of transmission from the female to male and 20%	16
	from the male to female.	17
A.	Yes, this is a cross-sectional study.	18
Q.	They certainly conclude from this study there is sexual	19
	transmission going both ways.	20
A.	They changed their conclusion in their prospective	21
	studies which was published in 1994.	22
Q.	We'll come to that in a moment. Let's look at what	23
	they're saying in this study that you rely on. 'It is	24
	unlikely that we misclassified male to female	25
	transmission as all index women in the 19 couples in	26

whom transmission occurred presented well documented 27
risk factors for HIV infection, whereas their male 28
contacts denied any risk other than heterosexual 29
contact. Since most of the index cases were drug users 30
or former drug users one possible bias could be the 31
enrolment of contacts who had been infected through 32
injecting drug use without reporting it. However, the 33
proportion of infected contacts was similar for couples 34
in whom the index case was and was not a drug user, 35
suggesting that inclusion of unrecognised drug users was 36
rare. Thus any effect resulting from this potential 37
bias would be minor'. That's what it says there. 38

A.	That's what they're saying. How do they know that	1
	people said they don't use drugs they're not using	2
	drugs. They say there could be bias, they say people	3
	could lie so this is an interpretation. They don't have	4
	evidence for that.	5
HIS HONOUR		6
Q.	One of the difficulties about all of these types of	7
	analyses and papers is that the researchers who present	8
	them are always reliant upon, whether it's a prospective	9
	study or a retrospective study or any other study, it	10
	relies to a degree on the information that is supplied	11
	to them by the people who are the subject of the study.	12
A.	I totally agree your Honour, and that's why	13
	epidemiological studies cannot prove, cannot be	14
	considered proof and the best of them - and even there	15
	can be coercion - but the best of them are the	16
	prospective study, and the prospective study they	17
	conclude differently, that's all I'm saying.	18
XXN		19
Q.	Yesterday you tried to explain away your evidence by	20
	saying they might be lying. Here the authors have	21
	turned their minds to that and looked at the samples and	22
	said 'If you look at the people who are the sample the	23
	indications are that this wasn't the case'.	24
A.	Sorry, I didn't hear you.	25
QUESTION WITHDRAWN		26

Q. The authors of this report were alive to the issue of 27
the possibility of people not telling the truth about 28
drug use, weren't they. 29

A. Yes. 30

Q. So they looked at the sample group that they were 31
working with and they saw that in the couples where 32
no-one was a drug user you had about the same rate of 33
transmission as you did with the couples in which one 34
was a drug user. 35

A. How did you say one said he wasn't a drug user and were 36
not drug users. 37

Q. So they all might be drug users. 38

A.	They all could be drug users. They didn't have that	1
	many. They have tried very hard in Europe, even that	2
	small number, in eight countries and, after that, in	3
	nine countries, so you don't know.	4
HIS HONOUR		5
Q.	I mean, this is going to be a constant problem, isn't	6
	it, in these kinds of studies, because many of the	7
	people who are the subject of the studies will have more	8
	than one risk factor.	9
A.	Yes, I totally agree, I totally agree.	10
XXN		11
Q.	The authors then go on to conclude based on the study,	12
	'Male to female transmission seemed to be twice as	13
	effective as female to male transmission. This agrees	14
	with results obtained for other sexually transmitted	15
	diseases, such as gonorrhoea, for which male to female	16
	transmission seems two to three times more effective	17
	than female to male transmission.' That's what it says	18
	there.	19
A.	Yes.	20
Q.	So what we have there is a consistency between the	21
	transmission of HIV and other STDs between female to	22
	males compared to male to female.	23
A.	You don't have proof here. You have to have proof and	24
	you don't have proof.	25
HIS HONOUR		26

Q. That may be an issue I have to determine at the end of	27
the day.	28
A. Sorry.	29
Q. I'm not asking you to apologise, but what amounts to	30
sufficient proof may be an issue that I have to, at some	31
stage, wrestle with.	32
A. I totally agree with you.	33
Q. In your opinion you don't have -	34
A. Totally.	35
XXN	36
Q. If we continued down that column, about halfway down	37
under the risk factors there is the words 'Anal sex'.	38

Do you see those. It's a new paragraph.	1
A. Yes.	2
Q. 'Anal section has been shown to increase the risk of	3
male to female transmission in our and other studies'.	4
Do you see that.	5
A. Yes.	6
Q. You'd agree that that's what it says there.	7
A. Yes, I agree.	8
Q. I'll go ahead about five lines to a sentence that begins	9
with the word 'Because'.	10
A. Yes.	11
Q. 'Because HIV'; do you see that.	12
A. Yes.	13
Q. 'Because HIV is more easily recovered from blood cells	14
than from genital secretions a higher quantity of viral	15
particles may be present in the vagina of HIV positive	16
women during menses'. That's another risk factor that's	17
been identified in the literature, whether or not a	18
woman has been -	19
A. You have more particles in the vagina - you think there	20
is no evidence for any particles in the vagina. The	21
only evidence we have for the existence of HIV in the	22
vagina is p24, the finding of a p24 protein using	23
antibodies, to a protein which is said to be HIV but was	24
found in a place in a material which did not have any	25
retroviruses. That's all the evidence we have for the	26

existence of HIV in the vagina. 27

Q. Right, well I might actually go back to the question now 28

Ms Papadopulos and, if you'd listen to the question and 29

answer it, we might get through this more quickly. The 30

question is do you accept that it has been reported that 31

one of the risk factors in terms of transmission of HIV 32

is a woman menstruating. I'm not asking you whether you 33

agree with it. Do you accept that has been reported as 34

one of the risk factors. 35

A. It has been reported but there is no evidence. 36

Q. Just reading on from where I left off, the final passage 37

I want to put to you, 'It should be noted, however, that 38

these high risk sexual practices (anal sex and sex	1
during menses) were not essential for transmission.	2
Indeed, 40 out of 82 infected women never practised anal	3
sex, and eight out of the 19 infected men never had	4
intercourse during their partners' menses'. That's what	5
it says there.	6
A. Yes.	7
Q. So again the authors of the report have been alive to	8
that issue, that is that there may be other risk	9
factors, like anal sex.	10
A. Yes, anal sex is a risk factor; it is the main risk	11
factor.	12
Q. But 40 out of 82 women who were infected had never	13
practised anal sex.	14
A. Yes, that's what they report.	15
Q. Let's go to the European study now. This was the one	16
relied upon for your slides 31, 32 and 33. I'll just	17
start off by reminding you what you told us in evidence	18
about this particular study - p.162, your Honour at line	19
28. Ms Papadopoulos you said this 'We are continuing	20
again with European study group 1994. This is a	21
prospective study when they had, as I said, the	22
cross-sectional study and in 1994 they reported results	23
from a prospective study, and this is known as the de	24
Vincenzi study. The study started in 1987 and ended up	25
in 1991, March. They had 378 eligible couples. They	26

had 10 centres from eight countries. 74 of the 27
 individuals were lost to follow-up. 11 of them refused 28
 to give any answers regarding their sexual behaviour. 29
 124 out of the 256 used condoms. Antibodies became 30
 positive in 12 out of the 256 partners, of which eight 31
 were women and four were men, so from 1985 to 1995, from 32
 10 centres in 10 European countries, they could come up 33
 only with four men who are said to be infected by 34
 heterosexual sex. Slide 32. As I said, 167 of 245 35
 couples were IV drug users, 27 were bisexual contact, 41 36
 were heterosexual, seven African men and woman, 22 37
 European men and women. 12 were unknown so that means 38

the majority of people were intravenous drug users and I 1
repeat, Nancy Padian stresses again and again, anyone 2
can lie but the people who are partners of infectious 3
drug users, they have a much higher probability 4
themselves to be also drug users. 5

CONTINUED 6

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E. PAPADOPULOS-ELEOPULOS XXN

Slide 32, none of the men, as I said, were questioned 1
about oral drugs. That is important because at least 2
people who use cocaine, that have no IV drugs, can have 3
even a higher positive range of the antibody test than 4
people who use intravenous drugs. They don't say what 5
was the origin of the four men. Were they African? 6
Were they European? I will just pause there. You go 7
on. You agree that that portion I read out to you was 8
some of the evidence you gave in relation to those three 9
slides. 10

A. Yes. 11

Q. Was the Di Vincenzi article that you relied on for those 12
slides published in the New England Journal of Medicine 13
entitled 'Longitudinal study of human immuno-deficiency 14
virus transmission by sexual partners'. 15

A. Yes. 16

EXHIBIT #P37 ARTICLE ENTITLED 'LONGITUDINAL STUDY OF HUMAN 17
IMMUNO-DEFICIENCY VIRUS TRANSMISSION BY HETEROSEXUAL 18
PARTNERS PUBLISHED IN THE NEW ENGLAND JOURNAL OF MEDICINE 19
1994 TENDERED BY MS MCDONALD. ADMITTED. 20

21

Q. What I want to take you to, first of all, in light of 22
the passage I have just read out to you, is your 23
evidence from the last time, a passage which appears 24
under the heading 'Methods'. So it is on the front page 25
of the article on the right-hand side and it reads: 26

'Between March 1987 and March 1991, HIV infected men and 27
 women (index partners) and their heterosexual partners 28
 were recruited in hospital wards, outpatient clinics, 29
 clinics for the treatment of sexually transmitted 30
 diseases and local public health departments (HIV 31
 screening centres and drug treatment centres). The 32
 study excluded occasional partners and partners with 33
 other risk factors for HIV infection'. Then the authors 34
 list them: 'Intravenous drug use, male homosexual 35
 relations, receipt of unscreened blood products, sexual 36
 contact with multiple partners or one or more 37
 heterosexual partners who were from sub-Saharan Africa 38

or who had one of the above risk factors'. That is what	1
the authors say was part of the methodology they used.	2
A. Yes.	3
Q. So that excludes anyone who reports to be in any one of	4
those risk groups, including anyone who may have been a	5
partner of sub-Saharan African descent.	6
A. Yes.	7
Q. Because one of the explanations that you gave us in your	8
evidence, wasn't it, that we don't know anything about	9
these people. Maybe they were African.	10
A. Sorry?	11
Q. One of the explanations you gave us when you were giving	12
your evidence was 'What about these four men? Were they	13
Africans?'	14
A. Yes. They said African born but they maybe have been	15
Africans.	16
Q. I'm sorry.	17
A. They may have been Africans but they are not African	18
born.	19
Q. People doing this study were very alive to the issue	20
that someone involved from Africa may be from another	21
risk group. They have deliberately excluded them.	22
A. The ones who came from Africa but not Africans who are	23
born in Europe. There is a difference.	24
Q. So how many generations do you suggest they should go	25
back.	26

A.	I don't know. I'm not saying generation, I'm saying	27
	they excluded people who are migrants but not people -	28
	and there are many Africans who are in Europe.	29
Q.	How do you know that. Where do you see that from what	30
	they say here.	31
A.	It is somewhere in the study.	32
Q.	Where.	33
A.	They said they excluded the ones who are Africans who	34
	are migrants.	35
Q.	Where.	36
A.	I don't know. I will find out why they had that	37
	problem.	38

Q.	I might get you to have a look for that during the	1
	morning break so we don't hold things up. What they say	2
	is they excluded partners who are sub-Saharan Africa.	3
A.	Yes.	4
Q.	So your explanation is maybe -	5
A.	I'm saying they could have been Africans in Europe.	6
	There are many Africans who are African born but they	7
	did not exclude those.	8
Q.	So if you were advising the authors of this study, how	9
	many generations should they go back and make inquiries	10
	back.	11
A.	I did not say generations. I said only what they	12
	exclude, and they did not exclude people who were born	13
	in Europe that are from African origin. There are many	14
	Africans who live, for example, in England and in	15
	America, American Africans, who have much higher	16
	gammaglobins than white Americans or of white English	17
	people, and they have much higher gammaglobins who would	18
	lead to a positive test. That's all I am saying. They	19
	exclude only people who are, you know, migrants who	20
	came, who are the ones born there. There is a	21
	difference.	22
Q.	You will tell us after the morning break when we can	23
	find it in this article.	24
A.	It says in here. They say that. They don't say they	25
	excluded the ones who are not migrants, who are born	26

there.	27
Q. Let's continue with the methodology on p.342, over the	28
page. Do you see another relevant factor when one	29
considers what the result of this study really means is	30
that each visit the couples were counselled about the	31
risk of HIV infection and about safe sexual practices	32
according to the policies at the centre; correct.	33
A. Yes.	34
Q. So you are talking about a group of people who are alive	35
to the fact that one of the participants is HIV	36
positive. They know their partner is HIV positive.	37
A. Yes, they have partners who are HIV positive.	38

Q. And they know it.	1
A. Yes, they know it.	2
Q. And they are getting counselling about that.	3
A. Yes.	4
Q. And advice about that.	5
A. Yes.	6
Q. And advice about condoms.	7
A. Yes.	8
Q. But probably advice about viral load.	9
A. They could have been.	10
Q. That it may be safer to have sexual intercourse at some	11
times rather than others. That is the sort of advice	12
you would expect they may be given in a clinic like	13
this.	14
A. They may. Maybe they are not practicing. There are	15
people - I can name you many people who have partners	16
who are positive and they still continue to practice	17
unprotected sex.	18
Q. Let's go back to the abstract. Just look at what this	19
study concluded. At the very beginning on the very	20
front page are the words 'Abstract background':	21
'Worldwide, the predominant mode of human	22
immuno-deficiency virus HIV transmission is heterosexual	23
intercourse but the risk of heterosexual transmission	24
and the effectiveness of measures to prevent it are not	25
well defined'. That is the starting point of the	26

authors, isn't it; that heterosexual intercourse has 27
been established as being the predominant mode of the 28
transmission of the virus and that this article is about 29
looking at the effectiveness of measures to protect to 30
prevent that transmission. 31

A. I don't know. 32

Q. Under 'Results': 'A total of 304 HIV negative sub-genes, 33
196 woman, 108 men, were followed for an archway of 20 34
months. During the study, 130 couples, 42.8%, ended 35
their sexual relationships most often because of the HIV 36
infected partner's illness or death'. So in this study, 37
42.8% of these relationships ended because of death of 38

the person who had HIV. Doesn't that show some	1
correlation between being positive to an HIV test and	2
ultimately dying.	3
A. Sorry?	4
Q. Do you think that indicates some correlation between	5
someone testing positive for HIV and then dying	6
prematurely.	7
A. No, it indicates a correlation between having a positive	8
test and a health outcome. It doesn't indicate a	9
relationship which is positive for HIV in death because	10
we have no evidence that the positive test proves HIV	11
infection. You've got to have that first before you say	12
there is a correlation if a correlation between HIV and	13
death. You have to have another step to say this shows	14
that HIV is the cause of death; that is, you have to	15
prove that HIV causes the disease. So we don't have	16
even the first step.	17
HIS HONOUR	18
Q. We have got a positive test, haven't we.	19
A. Totally agree. We have a positive test and we totally	20
agree, but there is a correlation between a positive	21
test and a higher probability of death. I totally agree	22
with that. What is disagreement is that this test	23
proves that HIV is the cause of death. That's the	24
difference.	25
XXN	26

Q. Let's go to the conclusion of the authors on the	27
right-hand side of the page with the heading	28
'Conclusions'.	29
A. Yes.	30
Q. The authors concluded from this study that 'Consistent	31
use of condoms for heterosexual intercourse is highly	32
effective in preventing the transmission of HIV. Among	33
couples not using condoms regularly, the risk of HIV	34
transmission varies widely'. Doesn't that of itself	35
indicate some support for the proposition that HIV is	36
sexually transmitted.	37
A. No. No. If HIV is a positive test - not HIV. If a	38

positive test is due to some antigenic stimulation by	1
things found in semen, you have reverse correlation	2
between a positive test and the use of condoms. The	3
more condoms you use, the less the probability to have a	4
positive test but it doesn't mean it is HIV.	5
HIS HONOUR	6
Q. You say it does not mean it is HIV. What would you say	7
it might be. I know you say you can't identify what it	8
is and there is no evidence but if, for example, 10	9
people test positive and of those 10 they continue to	10
have unprotected sexual intercourse, and this is an	11
example - if they continue to have unprotected sexual	12
intercourse with partners and there are no other risk	13
factors, let's assume for a moment, and after a period	14
of time eight of those 10 partners also test positive,	15
isn't that evidence that whatever you may call it is	16
being sexually transmitted.	17
A. Your Honour, you have to have evidence. If you have	18
these 10 people who are HIV positive, and let's define	19
them, you have 10 woman who are positive and 10 men who	20
are positive -	21
Q. Yes.	22
A. Now, if you have evidence - now, it depends which these	23
couples are. Are they gay men or are they heterosexual?	24
Q. Assume you have got 10 heterosexual men who have tested	25
positive.	26

A. Yes. 27

Q. And 10 women who have not tested positive. 28

A. Yes. 29

Q. And you monitor them over a period of time and they 30
continue to have unprotected sexual intercourse and 31
there are no other risk factors. It is not anal, it is 32
vaginal sexual intercourse, and after a period of time 33
eight of the 10 women test positive. What would you 34
conclude from that. 35

A. I cannot conclude it is something which is sexually 36
transmitted, first of all. 37

Q. You can't. 38

A. No, you can't, because you have to have another 10 women 1
who are positive and have sex with 10 negative men and 2
then they will transmit. It is not necessarily to have 3
the same number of men being positive. 4

Q. No. 5

A. But the men will become positive as well. Then you can 6
say - and even that is not sufficient - you have to show 7
that the semen, it is a virus. 8

Q. That might be a debate that is yet to be determined 9
but - 10

A. You could say that it is an indication. You could say 11
that. It definitely would be an indication. 12

Q. That comes back to the fundamental question, doesn't it, 13
of what you required before you could reach a conclusion 14
scientifically that the virus exists. That comes back 15
to the very basis of your evidence, doesn't it. 16

A. Yes. 17

Q. You say that you need certain events or certain 18
experiments - 19

A. Steps. 20

Q. - or steps, and if those steps are not achieved, then 21
you don't have sufficient proof. There may be others, 22
and I don't know, I haven't heard any evidence yet, who 23
say that you don't need all of those steps before you 24
can reach a conclusion. 25

A. But let's assume that you have a virus. Let's assume 26

that you have a virus. But then, to say that this virus 27
is sexually transmitted, it is exactly what your Honour 28
said. We assume it is but then we have to have 10 men 29
who transmitted to women. 30
Q. Women. 31
A. Women, and 10 women who transmitted to men. 32
Q. Or some women. 33
A. We are not saying the same number. You have got to have 34
that. 35
Q. You have got to have both ways, you are saying. 36
A. You have to have it both ways and there is no evidence. 37
I mean, it is just not possible. I will tell you why. 38

This is a publication by Australian researchers and it 1
was in 1990 - I started to say it yesterday but I did 2
not finish - it was published in 1986 by Ian Fraser and 3
his associates. It was a study in gay men. They 4
concluded, I quote: 'As in studies in the United States, 5
the presence of HTLV-III antibodies at recruitment was 6
strongly associated with a large lifetime number of 7
sexual partners'. Now, in parenthesis is 'X square 8
equals 28.86'. 9

Q. You have got the document there. 10

A. Yes, I do. 11

HIS HONOUR: Do you have any objection to me looking 12
at it, Ms McDonald? 13

MS MCDONALD: Only on the basis that the actual 14
document is produced to us. 15

HIS HONOUR: We may have a source to it here as well. 16
The document has been produced. 17
Mr Borick, have you seen it? 18

MS MCDONALD: I maintain that we ask for an actual copy 19
of that study. 20

HIS HONOUR: You might be able to get it yourself, 21
Ms McDonald. It seems to be a medical journal. 22

MS MCDONALD: We couldn't find it yesterday. It 23
doesn't seem that the reference is correct. 24

HIS HONOUR: Do you have any objection to me accepting 25
this document, say, de bene esse? 26

MS MCDONALD: No. 27

HIS HONOUR: I will mark it for identification rather 28
than tender it on the basis that the source material is 29
located. 30

MS MCDONALD: I am content with that. 31

HIS HONOUR: Rather than read it into the record, it 32
is probably easier that I accept it, mark it for 33
identification for the moment and we will have to deal 34
with it at some stage. Mr Borick, seeing as the 35
prosecution can't find the original article, it may be 36
that you could assist in obtaining it. 37

MR BORICK: Yes, we will. 38

HIS HONOUR:	Subject to that, I will mark the document	1
	for identification A9.	2
MFI #A9	EXTRACT FROM PAPER UNDER THE AUTHORSHIP OF PROFESSOR	3
FRASER	IN THE MEDICAL JOURNAL OF AUSTRALIA, VOLUME 144,	4
1986,	MARKED FOR IDENTIFICATION.	5
		6
HIS HONOUR.		7
Q.	I can read it rather than you having to put it on the	8
	record.	9
A.	Yes.	10
HIS HONOUR:	If you don't have any objection,	11
	Ms McDonald, I will just read it.	12
MS MCDONALD:	Okay.	13
CONTINUED		14
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E. PAPADOPULOS-ELEOPULOS XXN

HIS HONOUR	1
Q. Is there anything more you want to say about this.	2
A. Even in 1986 there was evidence that this direction is	3
only the passive party, so if it isn't in gay men, it	4
can't be different in heterosexual.	5
XXN	6
Q. Staying with that study, p.342, do you have it.	7
A. Yes.	8
Q. There is a heading 'Frequency of condom use' on the	9
right-hand side.	10
A. Yes.	11
Q. That there sets out the results of the questions that	12
were asked about the frequency with which people were	13
using condoms.	14
A. Yes.	15
Q. Before we go to what the authors actually said, I would	16
like you to have a look at what you put in your	17
PowerPoint that you presented to the court about this	18
particular factor. In slide No.31, you have put '124	19
out of 256 couples used condoms'; correct.	20
A. Slide 32?	21
Q. Slide 31.	22
A. I'm sorry, yes.	23
Q. '124 out of 256 couples used condoms'.	24
A. Yes.	25
Q. You repeated that again in your evidence.	26

A. Yes.	27
Q. '124 out of 256 used condoms'.	28
A. Yes.	29
Q. That is not the whole truth, is it, if we look at that	30
passage.	31
A. What is not the truth?	32
Q. '256 couples were classified according to the frequency	33
of condom use during follow-up, only 124 couples -	34
48.4% - used condoms for every episode of vaginal or	35
anal intercourse (consistent condom use). 121 couples -	36
47.3% - did not always use condoms (inconsistent condom	37
users). Among the 121 couples who were inconsistent	38

users, 61, or 50.4%, used condoms for at least half of	1
their sexual contacts but not for every contact and 60,	2
49.6%, rarely or never used condoms.' And then there is	3
11 who didn't answer questions. That is the full	4
picture about condom use in this study.	5
A. So, they are the only ones who used condoms all the	6
time, the others used, not even 50%. You cannot say	7
that they are using condoms.	8
Q. 60 people used condoms for at least half their sexual	9
contact, which means that group includes people who may	10
have only not used one once. If they didn't use a	11
condom on one occasion, they would fall into that group	12
of 60 people, wouldn't they.	13
A. Because 50%, and they have sex twice, one time they use	14
and the other time they did not use. If they have 1,000	15
times sex, they would have used condoms, at most, 500	16
times and the rest will be without condoms.	17
HIS HONOUR	18
Q. I think the point that was being made is that when you	19
consider how the people were classified, if you had a	20
person who had 1,000 episodes of sexual intercourse and	21
did not use a condom on one occasion, then they would be	22
classified as an inconsistent condom user.	23
A. But then subdivided - they are subdivided - it is	24
inconsistent and they say some use 50% and others use	25
never.	26

Q. I understand that but 50.4% used condoms for at least	27
half their sexual contact. The point that is being put	28
to you is that you may have had people who used condoms	29
99 times out of 100 and, if that were the case, they	30
would be classified as inconsistent condom users.	31
A. But you don't know.	32
Q. No, you don't know but the point that is being made -	33
A. They do not subdivide.	34
Q. They do not give the breakdown.	35
A. I agree.	36
XXN	37
Q. Another scenario might be that people in the	38

inconsistent condom users group, use condoms for some	1
sexual practices; like vaginal or anal, but not for	2
oral. They also end up in the inconsistent group.	3
A. It is not here. We cannot discuss evidence that is not	4
there.	5
Q. The point I am making to you is that putting into that	6
PowerPoint presentation, '124 out of 256 couples used	7
condoms', you only put part of the picture.	8
A. With the other ones, you cannot say then they're using	9
condoms because they're not using them all the time.	10
Q. It doesn't say in your PowerPoint slide even '124 out of	11
256 couples always used condoms. There were some who	12
used them on less occasions'. It is a blanket	13
statement: '124 out of 256 couples used condoms'.	14
A. We put the ones which use condoms all the time.	15
Q. You didn't refer to that in your evidence either.	16
A. They had plenty of opportunity for so many years for HIV	17
to be transmitted.	18
Q. Over the page, at p.343, first column, still dealing	19
with the information that comes under the heading of	20
'Frequency of condom use' I want to take you to the last	21
paragraph before the heading of 'Sero-conversion rates',	22
the paragraph beginning 'The other modifications'; do	23
you see that.	24
A. Yes.	25
Q. They there talk about another factor that might be	26

relevant in our consideration of what the statistic of 27
12 infected people out of 378 eligible couples mean. 28
The other modification that the authors observed was in 29
sexual behaviour recorded during the study, including 30
'a decreasing frequency of sexual contact and a 31
cessation of anal sex, sex during menses and oral sex'. 32
There are at least some in this group of people who were 33
modifying their sexual behaviour at the time this study 34
occurred. 35
A. We agree. If they don't do anal sex, they are not going 36
to become positive. It is full stop and that's what 37
they did, they modified it and they don't become 38

positive.	1
Q. Taking you to one final reference in this article,	2
p.345, right-hand-side top of that column, beginning	3
with the word 'Indeed'.	4
A. The word 'Indeed'?	5
Q. The word 'Indeed, recent studies'. P.345, top	6
right-hand corner; do you see that.	7
A. Yes, yes.	8
Q. This comes under the heading of 'Discussion' in the	9
paper. 'Indeed, recent studies suggest that male to	10
female transmission is twice as efficient as female to	11
male transmission. Anal sex does not significantly	12
increase the risk of transmission to the female	13
partner'. They go on to say 'This result could be due	14
to a lack of power, since only eight women continued to	15
have unprotected anal sex with their HIV-infected	16
partners. The incidence of sero-conversion among these	17
women was 27.8%, as compared with 11.7% among women who	18
did not have unprotected anal sex'. Do you see that.	19
A. Yes.	20
Q. The authors there suggest, whilst they accept there may	21
be other interpretations, when one reads the results of	22
this study, anal sex doesn't seem to increase the risk	23
of transmission from male to female.	24
A. They found in the cross-sectional study, the European	25
study and every other single study in America and	26

European studies, that anal sex increases a positive 27
test. As I said, they found it in their previous study, 28
in the cross-sectional study and now they come and say 29
'no'. 30

Q. In the references we see there are two separate studies 31
they have relied on to come to that conclusion. 32

A. Every single study, to date, has found - this is another 33
finding which makes us question - first of all, we 34
cannot say about the anal sex because that has been 35
shown in all the studies, including European study in 36
the cross-sectional part. They say 'No', all right. 37
The thing is, how is it possible that in Europe, America 38

and in Australia, the efficiency of transmission is much 1
smaller from female to males - here in Europe and in 2
America - but not in Asia and not in Africa? They are 3
the same - in fact, they have equal transmission. How 4
can this virus discriminate between European men and 5
women, and American, on the one hand, and Asia and 6
Africans on the other? 7

Q. I'm going to digress from these studies to pick up on a 8
topic that was raised by his Honour that relates to the 9
question of proof - how do you prove something - and in 10
particular I want to take you back to the topic of 11
epidemiological evidence. Yesterday I asked you about 12
it and I want to remind you what your response was. 13
P.512, line 3: 'Q. Do you accept that epidemiology has 14
an important valid role to play in science. 15

A. Epidemiology cannot prove or disprove anything. 16
Epidemiology can only prove correlation but cannot give 17
you scientific proof. Q. Isn't it the case that, as a 18
scientist, you look at all the available evidence, you 19
look at scientific studies, you look at epidemiology, 20
biology, virology, immunology and then from the combined 21
effect of all the information you draw your conclusions. 22

A. You cannot have an epidemiological study of HIV if 23
you have not got virological evidence or its existence. 24
Professor Gallo will be the first one to tell you that. 25
You cannot prove the relationship between HIV and AIDS 26

and claim scientific evidence or proof by an 27
epidemiological study. I think that is what it is in 28
his statement'. You agree that was your evidence 29
yesterday. 30
A. Yes. 31
Q. While we're on the topic of proof, when you told the 32
court a moment ago that AIDS is caused by antigenic 33
stimulation, what proof did you rely on; in terms of 34
that statement. 35
A. I said a positive test. A positive test, that's what I 36
said. A positive test is cause for antigenic 37
stimulation. 38

Q. What did you mean by that. 1

A. I said if you are - if we're exposed to foreign 2
substances, it is a known fact - he would know better 3
than me - you develop antibodies and these antibodies 4
will cross-react and that is the main property of 5
antibodies, one of the main properties that they 6
cross-react - in fact, there is evidence that cross TC4 7
antibodies with intercourse and then it will cause a 8
positive test. That's all I said. You would expect, if 9
you have antigenic stimulation, you have an increase of 10
antibodies, production to any of the antigen you are 11
exposed and these will lead to a high probability in 12
cross-reacting with the proteins that are in the 13
antibody test kits. 14

Q. Your evidence is that foreign antigens in the body cause 15
a positive test result. 16

A. Yes. 17

Q. Didn't you say in evidence that they cause AIDS; 18
antigenic stimulation causes AIDS. 19

A. I did not say antigenic stimulation causes AIDS, I said 20
the positive test. There's a difference. 21

Q. Where is the proof that foreign antigens, per se, cause 22
a positive result to an HIV test. 23

A. I said you cannot have any other explanation. It cannot 24
be a virus. The only correlation is between exposure to 25
the semen and the result - exposure to semen, which is 26

absorbed from the gut, whatever is there - that causes	27
the positive test.	28
Q. Where's your proof, this proof you keep talking about	29
for that theory.	30
A. This is not proof, I say it is an explanation. That's	31
what they said. They said this will be the only	32
explanation. You cannot have another explanation. It	33
has to be - it is a known infection in the semen, or	34
semen itself, which causes the antigenic stimulation and	35
a positive test. It can't be sexually transmitted.	36
Q. I want to take you to an article on the role of	37
epidemiology in medicine and in relation to the disease	38

causation. This was an example that you had a chance to see before court this morning.

A. I did not have time to read it but I have seen the article.

Q. Weren't you asked to read it.

A. Please go ahead then, ask me what you want.

EXHIBIT #P38 ARTICLE TITLED 'DISEASE CAUSATION: THE ROLE OF EPIDEMIOLOGICAL EVIDENCE' BY MARLEY AND MICHAEL, PUBLISHED IN THE MEDICAL JOURNAL OF AUSTRALIA VOL.155, 10/07/1991 TENDERED BY MS MCDONALD. ADMITTED.

MS MCDONALD: Could I just check how MFI A9 was described?

HIS HONOUR: I didn't mark down the description but I think, if my memory serves me correctly, it was described as 'a quote from an article, purportedly, in vol.144 of the Medical Journal of Australia 1986, by Professor Fraser'.

XXN

Q. Is that an accurate description of what that document is; that is a quote from an article by Professor Fraser.

A. Yes.

Q. That article, wasn't it in fact a letter, a letter to the editor.

A. Maybe a letter to the editor.

Q. You don't call a letter to the editor an article.

A. It is a finding. It is a finding.	27
Q. It is not subject to peer review, is it.	28
A. Yes, it may have been peer-reviewed.	29
Q. There is a difference between an article in a medical	30
journal and a letter to the editor.	31
A. Do you mean the professor was wrong in reporting this	32
data?	33
Q. Do you agree there is a big difference -	34
A. I am saying that means that if it is a letter then you	35
discard - you say that the finding is wrong and if it is	36
an article the finding is right, so it means that	37
Professor Fraser reported the wrong data.	38

Q. Going back to the question I asked you, do you accept, 1
in your expert field, that there is a big difference 2
between an article that's peer-reviewed in a medical 3
journal, as compared to a letter that is subject to no 4
review. 5

A. Yes, it was a letter, then. It was at least two pages. 6
So, as I said, I will accept the findings in the letter, 7
if they are in a letter or an article, if that will 8
diminish its value, unless you question Professor Fraser 9
and his findings. 10

CONTINUED 11

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E. PAPADOPULOS-ELEOPULOS XXN

Q. Let's go to this article, which is an article that was tendered. 1
2
HIS HONOUR: I'm just wondering whether we ought not tender A9 at this stage because it has been referred to. 3
4
MS MCDONALD: Yes, I have cross-examined about it now. 5
EXHIBIT #A9 MFI A9 TENDERED BY MS MCDONALD. ADMITTED. 6
7
XXN 8
Q. We go to P38, that's the article with the large title 'General Practice', do you see that. 9
10
A. Yes. 11
Q. And that was reported in the Medical Journal of Australia in 1991. 12
13
A. Yes. 14
Q. You would agree that the Medical Journal of Australia is a reputable journal. 15
16
A. Yes, I agree. 17
Q. It is one of the main ones. 18
A. I won't say the main ones. 19
Q. Reputable. 20
A. I definitely don't say it's the main ones. 21
Q. You agree it's reputable. 22
A. I agree. 23
Q. Have you read this article at all. 24
A. No. 25
Q. What I am going to do is I'm not going to ask you any 26

questions about it.	27
A. No, do, because I have read a lot of articles on the	28
value of epidemiology. In fact, there have been a lot	29
of discussions regarding epidemiology, very, very	30
lengthy articles in special issues in science on the	31
value of epidemiology, and epidemiologists themselves	32
are questioning how can it be that epidemiology be used	33
to prove, be used as scientific evidence. And in fact	34
one of the epidemiologists from Harvard said that 'If we	35
are not careful, we are going to be out of jobs',	36
because epidemiology - the example they have a lot is	37
about how epidemiological studies are interpreted or are	38

claiming to prove a correlation between heart diseases	1
and fat, and it was very, very extensive. And I think	2
this article has something similar to that. So, no,	3
epidemiologists themselves agree and, as I said, I will	4
find this article, I have them in my office, which they	5
agree that epidemiology cannot be used as proof. This	6
epidemiologist, the most renown epidemiologist.	7
Q. I will be asking you some questions about this article	8
after lunch and I invite you to read it over the	9
luncheon adjournment so I can ask you some questions.	10
A. That's all right, okay.	11
Q. I will go back then to where we left off with the	12
different studies and we got to the point, and we moved	13
through the studies in the order you presented them, to	14
the University of California studies.	15
A. Yes.	16
Q. I will call those the 'Nancy Padian studies', are you	17
comfortable with that.	18
A. Yes.	19
Q. In your PowerPoint presentation, in slides 37, 38, 40,	20
41, 42, 43 and 44, you rely on three Padian studies.	21
A. Three publications.	22
Q. One in 1987, one in 1991, and one in 1997; correct.	23
A. Yes.	24
Q. And we have another slide in there relating to a slide	25
in 1988. Is it the case, though, that is one you have	26

	withdrawn because you can't find what that is based on.	27
A.	I could find out, but unfortunately I forgot. I have	28
	it, but I forgot.	29
Q.	You didn't find it, because on the last occasion you	30
	were asked to produce it.	31
A.	No, we were here. When you ask, we are here and I ask	32
	somebody from my office, a friend in fact, to look in my	33
	filing and finding that paper. She could not find it.	34
	But when I went back, I just omitted to look. That's	35
	all.	36
Q.	Whatever the reason, slide No.39 has been withdrawn, so	37
	we are left with the '87, '91 and '97 references.	38

A. But I think I delivered that paper. 1

Q. You're aware, aren't you, that 1997 study was published 2
and commented upon, that Nancy Padian, the author of the 3
studies, has attempted to clarify what the results of 4
the studies mean. 5

A. Yes. 6

Q. You're aware of that, aren't you. 7

A. Where? 8

Q. I'm asking you a question. Are you aware of the fact 9
that since the time the 1997 study was completed, that 10
Nancy Padian has written and clarified what those 11
studies meant. Are you aware of that fact. That's a 12
simple question. 13

A. Nancy Padian wrote a commentary on a website called 14
'AIDS Truth', the owner of which says that only they 15
have the truth about HIV and AIDS and nobody else. Yes, 16
I'm aware of that. 17

Q. And we will take it one step further: you were aware of 18
that before you gave your evidence in this court, 19
weren't you. You knew about that further clarification 20
from Nancy Padian before you even stepped into this 21
courtroom. 22

A. No, I did not know that. I did not know that. And if I 23
knew, it wouldn't make any difference. Even if I knew, 24
and I may have said it, I know, it does not make any 25
difference. I cannot remember if then I have it or did 26

not have it, but it wouldn't make any difference. These	27
are the studies - and let's go to the commentary. I	28
will be very happy to discuss her commentary, or her	29
clarification.	30
Q. I'm a little confused. Did you or didn't you know	31
before you gave evidence that subsequent to the 1997	32
study, Nancy Padian had written a clarification of her	33
interpretation of these studies.	34
A. Let's assume that I had -	35
Q. Did you know. It is a direct question. Did you know.	36
A. Let's say that I had it, I not question, let's say that	37
I had, I forgot, but let's say that I had it, I knew	38

that, it wouldn't make any difference to the	1
interpretation. No difference at all.	2
Q. Did you know before you gave your evidence about the	3
further clarification by Nancy Padian. It is a simple	4
question.	5
A. There is no clarification there. There is no	6
clarification. I cannot say there is a clarification	7
there. In fact, in that piece of writing, if anything,	8
she complicates things.	9
HIS HONOUR	10
Q. Can I ask the question perhaps this way: did you know	11
about the piece of writing.	12
A. Yes, I know that.	13
Q. Yes, but did you know about it at the time you gave your	14
evidence, I think the question is.	15
A. When I gave the evidence?	16
Q. When you gave the evidence and presented these slides,	17
did you know about the piece of writing by Nancy Padian.	18
A. I cannot recall. I just can't recall, because even if I	19
knew and I did mention it here, I would not have done it	20
because that would have to admit something, to admit	21
interpretation. It would not have changed.	22
Q. I understand that you say now that you have read it and	23
know about it, it wouldn't have changed your views, but	24
is your answer that you can't now recall whether you	25
knew about it or not.	26

A. I can't. And even if I knew, I read it and I know only	27
things which are changing, which are important. That	28
didn't change anything.	29
Q. Is it fair to say that if you had read it, you don't now	30
recall having read it because it wouldn't change	31
anything.	32
A. It wouldn't change anything. I may have read it, but it	33
wouldn't have changed anything.	34
XXN	35
Q. We might go straight to what she had to say, because	36
when we look at what she says in that article, I suggest	37
to you there is no way you wouldn't have a memory one	38

way or the other of having read this article. She is	1
damning of your interpretation of her studies.	2
A. No, she had not. Please read me, please read me.	3
MS MCDONALD: I tender a document headed 'Heterosexual	4
Transmission of HIV', Nancy Padian PhD, University of	5
California, San Francisco	6
HIS HONOUR: Mr Borick, have you seen this document?	7
MR BORICK: Yes, I have.	8
EXHIBIT #P39 DOCUMENT TITLED 'HETEROSEXUAL TRANSMISSION OF	9
HIV' BY NANCY PADIAN PHD, UNIVERSITY OF CALIFORNIA, SAN	10
FRANCISCO, TENDERED BY MS MCDONALD. ADMITTED.	11
	12
XXN	13
Q. Let's start at the beginning under the heading. Dr	14
Padian, is it. Is Nancy Padian a doctor, do you know	15
that.	16
A. She is not a medical doctor.	17
Q. Is she a doctor, is she Dr Padian.	18
A. She is a doctor. She is not a medical doctor.	19
Q. She goes on to say 'HIV is unquestionably transmitted	20
through heterosexual intercourse. Indeed, heterosexual	21
intercourse is now responsible for 70-80% of all HIV	22
transmissions worldwide'.	23
A. Yes.	24
Q. So she sets out right at the beginning her view about	25
the method of transmission of HIV.	26

A. There's no data there. 27

Q. And you relied on her studies, didn't you, to try and 28
support your argument that HIV couldn't be proved to be 29
transmitted. 30

A. I'm not relying on her evidence. I cannot rely on what 31
she says. I didn't rely on her evidence, I didn't rely 32
on her data, not of what she says. And in the reference 33
2, reference 2, which is a paper published by Padian, 34
and even she does not comment in any way else on here, 35
is a mathematical model of transmission. There is no 36
data there. It is a mathematical model. There is no 37
evidence. 38

Q. And she goes on to give some statistics. 'The current 1
likelihood of male to female infection after a single 2
exposure to HIV is' - she gives the percentages, but she 3
goes on to clarify it to say 'However, a man or a woman 4
can become HIV positive after just one sexual contact'. 5

A. Give me the references. 6

Q. That is what she says in this document that she has 7
written to clarify her - 8

A. That's what she says, but that's not what is - the 9
reference she gives, as I said, 2 and 3. 2 is the 10
reference by herself and some mathematician which are 11
mathematical models. And 3 is the European study, the 12
Da Vinci study, where they say, they admit that they 13
haven't got proof of heterosexual transmission. So how 14
can I take it? 15

Q. She goes on then to talk of different factors that might 16
impact on whether someone will become infected or have a 17
HIV positive test result, and then, starting with the 18
word 'Evidence', she sets out what she relies on. 19
'Evidence that specifically documents the heterosexual 20
transmission of HIV comes from studies of HIV-discordant 21
couples, (ie couples in stable, monogamous relationship 22
where one partner is infected and the other is not); 23
over time, HIV transmission occurs. Other studies have 24
traced the transmission of HIV through networks of 25
sexual partners. Additional evidence comes from 26

intervention studies that, for example, promote condom	27
use or encourage reductions in the numbers of sexual	28
partners: the documented success of these interventions	29
is because they prevent the sexual transmission of HIV.'	30
So she sets out what she relies on.	31
A. She says that, but if you look, if you study the	32
references, which I have done, each of them, you find	33
out that these references have not got any data.	34
They're all mathematical models. In fact, one of them	35
is - the principal author of one of them is a physicist	36
from Italy, is a professor of physics, and they are all	37
mathematical models.	38

Q. Then she goes on to deal with her own study and she says 1
'In short, the evidence for the sexual transmission of 2
HIV is well documented, conclusive and based on the 3
standard, uncontroversial methods and practices of 4
medical science. Individuals who cite the 1997 Padian 5
et al publication (1) or data from other studies by our 6
research group in an attempt to substantiate the myth 7
that HIV is not transmitted sexually are ill-informed at 8
best. Their misuse of these results is misleading, 9
irresponsible and potentially injurious to the public'. 10
Now, you are one of the groups she was talking about 11
there, aren't you. 12

A. She may be. 13

Q. Are you telling this court that you now have no memory 14
when you came in to give your evidence about whether you 15
read what Nancy Padian had to say about your sort of use 16
of her studies. 17

A. I'm not interested in what she says. I'm not interested 18
her data. And her evidence does not prove heterosexual 19
transmission, no matter how you take it. It is not what 20
she says in AIDS Truth. It is not what she says in 21
published scientific work, and for published scientific 22
work let me tell you in her prospective studies she had 23
over 170, or 173 I think, or five, individuals, men who 24
are positive and their negative partners, and women who 25
are positive and their negative partners. In the 26

average, they live up to 60 years, and even at the end 27
of the study, when the study started, the one I think, 28
only 33% of people who are using condoms. And at the 29
end of the study, 25% who were still not using 30
consistently condoms, and no-one, no-one of these 31
couples become positive. How can I say that the Padian 32
paper proves heterosexual transmission? How she can 33
say that her studies prove heterosexual transmission, 34
more importantly? 35

HIS HONOUR 36

Q. Can I ask you this: in your role as an expert witness, 37
did you not think it might be important to inform the 38

court that people upon whose studies you rely have a	1
different view as to the interpretation of them than	2
you.	3
A. I don't know. If it is important, yes, I will accept,	4
but, your Honour, she has no evidence for transmission.	5
Q. I understand your criticism of her, I understand that.	6
The question really wasn't related to that.	7
HIS HONOUR: You go on, Ms McDonald.	8
XXN	9
Q. Do you have the view that you have a greater level of	10
expertise about what these studies meant than the doctor	11
who actually conducted them.	12
A. I'm saying what they're publishing. They're not	13
publishing - you cannot say they say one thing and	14
they're publishing another thing. Unless they do that,	15
then I cannot see how she can say, how she can say that	16
her study proves heterosexual transmission. It's beyond	17
me.	18
Q. Let's go to look at -	19
A. Unless they mean totally different things.	20
Q. Let's look at what Dr Padian says is the misuse of her	21
studies and then we will look to see what you told the	22
court to see if it is similar. She goes on after that	23
passage I have just read to you to say 'A common	24
practice is to quote out of context a sentence from the	25
Abstract of the 1997 paper: "Infectivity for HIV through	26

heterosexual transmission is low". Anyone who takes the 27
trouble to read and understand the paper should 28
appreciate that it reports on a study of behavioural 29
interventions such as those mentioned above. 30
Specifically, discordant couples were strongly 31
counselled to use condoms and practise safe sex. That 32
we witnessed no HIV transmissions after the intervention 33
documents the success of the interventions in preventing 34
the sexual transmission of HIV. The sentence in the 35
Abstract reflects this success - nothing more, nothing 36
less. Any attempt to refer to this or other of our 37
publications and studies to bolster the fallacy that HIV 38

is not transmitted heterosexually or homosexually is a 1
gross misrepresentation of the facts and a travesty of 2
the research that I have been involved in for more than 3
a decade'. You don't remember whether you had read that 4
before you gave your evidence in court and relied on 5
your PowerPoint. 6

A. I cannot agree with that, that is a commentary by her 7
and her data shows a totally different thing. I repeat, 8
her evidence does not prove heterosexual transmission. 9
In fact, I remember now, last year we have wrote to Dr 10
Padian - 11

Q. So you remember now that you did know about it. 12

A. No, no, we did not write about this, we wrote in general 13
to her, and we say, or one of my - one of the members of 14
my group, and said, you know, 'Dr Padian, I read your 15
papers and as far as I'm concerned' - I have the 16
letters, not with me, but I have them. 17

CONTINUED 18

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E. PAPADOPULOS-ELEOPULOS XXN

It will be my PowerPoint presentation, the one which I	1
haven't shown, and I'll give the letters are responded	2
to Dr Padian and it says 'I read your studies and as far	3
as I am concerned your studies do not prove heterosexual	4
transmission. Am I wrong?' She came back and she said	5
'You are wrong; yes, you are wrong'. The - I've	6
forgotten now what she said, she spoke to somebody or	7
something. He wrote back and he said 'Yes, I read them	8
and that is what led me to conclude that your studies do	9
not prove heterosexual transmission' and she never came	10
back.	11
Q. This dialogue that you just told us apparently occurred	12
between one of the members of your group and Dr Padian.	13
A. Yes.	14
Q. You're aware of that correspondence at about the time it	15
was occurring.	16
A. It was correspondence last year. I just - I have it and	17
I'll give it to you.	18
Q. Putting aside what's in the article that's just been	19
tendered, before you gave evidence in this court you	20
knew that Dr Padian had told one of your own colleagues	21
that your interpretation of this data was wrong.	22
A. No. We came back to her and said - she came back to her	23
and said 'Because of your interpretation, what is that's	24
what you wrote there, and that's what you wrote there	25
prove to me there is no proof there was heterosexual	26

transmission' and she never came back. Scientists come 27
and tell you why you are wrong. She was very happy to 28
respond the first time but not the second time when she 29
found out that we know more about her study than she 30
thought. 31

Q. So are you suggesting that she deliberately didn't write 32
back to you because you knew about those studies - 33

A. She didn't have an answer and that's why she didn't 34
write. 35

Q. I'll go back to my question. At the time you came to 36
court to give evidence you knew that the person 37
responsible for these studies had told one of your 38

	colleagues that your interpretation of them was wrong.	1
A.	Yes; she said that, but she could not - after that she	2
	would not tell us why we are wrong.	3
Q.	You didn't think when you gave your evidence -	4
A.	She did not give us - yes, we kept the core study, we	5
	interpret, that was my interpretation on the studies.	6
	When I gave my evidence I didn't say that 'this is	7
	Padian's interpretation'. I said that 'this is our	8
	interpretation' and that is all the data show.	9
Q.	You didn't think, as an unbiased and impartial expert	10
	witness in this court, that you might say to his Honour	11
	'this is what we say the data shows' -	12
A.	But the data -	13
Q.	Let me finish; 'but your Honour should be aware that the	14
	author has a different view'. You don't think that	15
	shows the balance that an expert should show in these	16
	courts.	17
A.	No; I can't see that because we are saying what the data	18
	show. For anyone, you have to be even blind to know	19
	that this data shows that there is no heterosexual	20
	transmission, and the fact that she did not come back to	21
	us and she didn't tell us why we are wrong prove us	22
	right, if anything.	23
Q.	Just in terms of you did or didn't know; this isn't the	24
	first time Dr Padian's response has come up in evidence.	25
	It was referred to on the last occasion the court sat at	26

p.343. This was in the context of my cross-examination 27
of you in relation to another author who had responded 28
to what he described as the misuse of the Rodriguez 29
study. In that context I asked you this at p.343, line 30
36, 'You mention Padian. She is someone else who has 31
also written a response as a result of people doing what 32
she describes as misusing her results in her studies'. 33
Your answer was 'That is what I said, I know the thing, 34
that is what everybody does now. They go and publish in 35
AIDS Truth, where you cannot respond. It is such a truth 36
that seems to be beyond reach of any scientist. They 37
have - they are the gods, they have the truth and nobody 38

else can have it'. So we take it from that question and	1
answer that certainly on the last occasion you gave	2
evidence you knew about the Padian response.	3
A. I certainly knew. I'm not retracting; I said I may have	4
known, I just forgot.	5
Q. If we just go back to the Padian response, I'll just	6
finish off on that. She goes on to give further	7
clarification. She says 'If safe sex practices are	8
followed and, if there are no complicating factors such	9
as those mentioned above, the risk of HIV transmission	10
can be as low as our studies suggest ... IF. But many	11
people misunderstand probability; they think that if the	12
chance of misfortune is one in six they can take five	13
chances without the likelihood of injury. This 'Russian	14
Roulette' misapprehension is dangerous to themselves and	15
to others. Furthermore, complicating factors are often	16
not evident or obvious in a relationship, so their	17
perceived absence should not be counted on as an excuse	18
not to practice safe sex.' So she's there saying, isn't	19
she, that this isn't a mathematical equation where you	20
can work out probabilities by using sums -	21
A. Yes, we - that's exactly what that is, what we did, and	22
that is what we publish in the British Medical Journal.	23
The evidence I presented, we worked the probability of	24
transmission from her cross-sectional study and there it	25
was. I forget now, if you look there in the slide -	26

most probably you have the slides in front of you, maybe 27
I have them - let's look, the probability of 28
transmission, if you look at the slide 46, that is exact 29
what we calculated and then the probabilities are 30
ridiculously low. It is impossible to transmit HIV, 31
that's what it tells you. That is the cross-sectional 32
study. From the prospective study, the only one which 33
would use the evidence, no matter how you take it, no 34
matter what mathematical models you use, and 35
probabilities, the probability is zero. So she cannot 36
say that; that is why she public puts things in the AIDS 37
Truth, when people cannot respond. 38

Q. But the situation is, in that slide you just alerted us 1
to, slide 46, you've done exactly what Dr Padian 2
suggests, is adopt an inappropriate approach to the 3
question of the likelihood of transmission. 4

A. Sorry? 5

Q. You have adopted in slide 46 what Dr Padian has 6
described, in effect, as an inappropriate approach in 7
considering the question of transmission. You've just 8
turned it into a mathematical equation. 9

A. No, sorry, just read it again please; she says that we 10
don't know the mathematics, we don't know what the 11
probability of transmission is. That's what she says. 12
She says we don't know probability of transmission. 13
Here it is calculated by a mathematician - corrected. 14
We have done it and then he has checked and, in fact, we 15
used his formula. A mathematician. She doesn't know 16
that we have done this. This is published in the 17
British Medical Journal. She can't tell us that we 18
don't know what probabilities are. 19

Q. She says, 'Finally, it is a complete fallacy to allege 20
or insinuate that this work has been 'suppressed' or 21
'ignored' by the AIDS community - 22

A. Sorry, I cannot hear what you say. 23

Q. 'Finally, it is a complete fallacy to allege or 24
insinuate that this work has been 'suppressed' or 25
'ignored' by the AIDS community or unsupported by UCSF 26

or any other institution with which I have worked. To 27
the contrary, these findings have been seen as central 28
and seminal to the problem of heterosexual transmission 29
rates and the development of interventions to lower the 30
rate of transmission and infection world-wide, many of 31
which are being conducted by my research group. The 32
success of my working group has been fueled, not 33
hindered, by our research on the heterosexual 34
transmission of HIV, attested to by our long record of 35
peer-reviewed publications'. 36

A. We never said whatever you said. We never accused her 37
of all those things you're saying there. 38

Q.	Weren't you a moment ago saying that the reason	1
	Dr Padian didn't respond -	2
A.	She says totally different things there but we never	3
	said these things which she says there. You forgot we	4
	are not the only group who question Padian's studies.	5
	In fact, it's enough to go just do a google search and	6
	you'll find out there are so many people who question	7
	Padian's work, you'll be surprised how many there are.	8
	No matter, yes, we agree you have to look at	9
	peer-reviewed publication and her peer-reviewed	10
	publication show that she has never proven heterosexual	11
	transmission of HIV, never.	12
Q.	Ms Papadopoulos let me finish just before lunch by just	13
	putting this to you; up until this point in your	14
	evidence when I brought this clarification from	15
	Dr Padian to your attention, you hadn't been questioning	16
	her work. What you were attempting to do was to rely	17
	positively on her work, on her studies, to say that they	18
	support your contention that HIV is not sexually	19
	transmitted.	20
A.	Yes, that's what it does.	21
Q.	You have relied on them as positive proof of that fact.	22
A.	One of the studies. We didn't rely only on Padian's	23
	study. We rely on studies from gay men, we rely on	24
	studies from prostitutes, we rely on studies from	25
	haemophiliacs, we rely on studies from everywhere. This	26

is just one. Padian's is just one. We admit, in fact, 27
if you read when I gave my evidence I do say Padian, we 28
are the first and still the only ones to say how well 29
Padian's study was designed and executed. Nobody gives 30
her credit; we are the only ones who give her credit how 31
well her study was designed and executed and the 32
conclusion from it. We don't retract. As I said we are 33
the first ones to give her credit. 34

Q. In your selected passages from those studies, you didn't 35
think it might be relevant for his Honour to know that 36
those were studies conducted with the purpose of 37
determining how successful safe sex measures and 38

education had been.	1
A. But is not because she did not have - she ended up after	2
an average six years and were extreme, then went to any	3
lengths to make these people to stop their unsafe	4
practices and still, at the end, after so many years,	5
25% they're not using condoms. I mean how safe they can	6
be? We're not saying, I'm repeating, and that's why I'm	7
upset when they say that, you know, I'm not for safe	8
sex. I did not say that. To the contrary, we are all	9
for safe sex. I said yesterday when you asked me about	10
the \$10 million which the government is giving, I said	11
the money very well spent. They should educate people	12
to have safe sex. We are never going to be get safe	13
sex, so we don't say that Padian is not right in her	14
effort to educate people for safe sex. We agree with	15
that. We don't agree as to what causes the positive	16
test. That's all.	17
HIS HONOUR	18
Q. I just need to clarify it in my own mind; when you say	19
'safe sex', what do you mean.	20
A. I mean safe sex.	21
Q. Does that mean safe sex in heterosexual activity as well	22
as anal sex.	23
A. I mean -	24
Q. Heterosexual vaginal activity as well as anal -	25
A. Not vaginal; there is no evidence of transmission.	26

Q. I just want to make it clear; by 'safe sex' you mean sex	27
involving anal sex.	28
A. Yes, we use always condoms for anal sex no matter if	29
they are gay men or they are woman.	30
Q. What about heterosexual vaginal sex.	31
A. No, there is no evidence.	32
Q. So as far as, from your view, in your opinion, someone	33
who has tested positive, a male testing positive, there	34
is no evidence that, if he has unprotected vaginal sex,	35
there is any risk to the female.	36
A. Will cause the woman to become positive.	37
Q. Any risk to the woman.	38

A.	Yes. Let me give you another study from Australia and I	1
	think -	2
Q.	Perhaps we can deal with that after lunch. I just	3
	wanted to clarify what you understood to be safe sex,	4
	because that wasn't clear to me.	5
A.	Yes; what I understood is exactly what the study have	6
	shown. As I said, there is no evidence, there is no	7
	evidence that having sex, vaginal sex, will lead to a	8
	positive test.	9
Q.	So you would disagree with Dr Padian.	10
A.	I mean - her data show that.	11
Q.	No, you would disagree with that.	12
A.	I would disagree with safe sex?	13
Q.	You would disagree with her opinion because she clearly	14
	says in this paper or in this letter that with	15
	heterosexual sex there is a risk of contracting HIV.	16
A.	Your Honour, she doesn't say which sexual practice.	17
	Anal intercourse, as I said, is practised by more women	18
	than men.	19
Q.	Do you suggest that she doesn't say that heterosexual	20
	sex, not anal sex, heterosexual sex is not a risk factor	21
	for someone who engages in it with another person who is	22
	HIV positive. Are you saying that she doesn't say that.	23
A.	She doesn't clarify it. She doesn't clarify it. She	24
	doesn't clarify what she means by 'heterosexual sex'.	25
Q.	Well, she says this, at the bottom of the page 'To the	26

contrary, these findings have been seen as central and 27
seminal to the problem of heterosexual transmission 28
rates and the development of interventions to lower the 29
rate of transmission and infection world-wide, many of 30
which are being conducted by my research group'. Isn't 31
she suggesting there that her research includes 32
heterosexual sex, heterosexual vaginal sex. 33
A. She doesn't clarify what sexual practice. She may imply 34
that, but she doesn't clarify what sexual practice. 35
ADJOURNED 1.05 P.M. 36

37
38

RESUMING 2.19 P.M.	1
Q. I will pick up where we left off; that is, the topic of	2
the Padian studies.	3
A. Your Honour, first, I have been asked to - you said that	4
in the European studies they are not Africans. Remember	5
we had a lot of - you accused me for putting Africans	6
there when the paper hasn't got Africans, right? Well,	7
if you look at the at table which is on p.343, you will	8
find out African, 4.	9
HIS HONOUR	10
Q. What are we looking at.	11
A. There is no number here.	12
HIS HONOUR: Which document are we looking at?	13
MR BORICK: P37:	14
HIS HONOUR	15
Q. What particularly are you referring to.	16
A. Your Honour, Ms McDonald said that in one of the slides	17
from the European study I put there four patients as	18
being African - or four, whatever you call them, four of	19
the individuals, being from Africa. She did not have	20
any Africans but as you can see from the table, they did	21
have four African individuals there. What they said in	22
the front is they excluded people who came from	23
sub-Saharan Africa.	24
Q. I can't see where in -	25
A. Sorry, in the front page -	26

Q. Yes, I understand that, but in the table, I can see four	27
unknown but I can't -	28
A. No, Africa. It says 'African', which is 'homosexual	29
contact in European' somewhere -	30
Q. I see. Thank you. I was looking at the wrong table.	31
343.	32
A. Yes.	33
Q. 'African, 4'.	34
A. So that's what we put in our slides.	35
Q. I go back to the Padian studies. The first one that you	36
have referred to is the 1989 study. Was that slide	37
based on an article headed 'Male-to-female transmission	38

of human immuno-deficiency virus'.	1
A. Yes.	2
EXHIBIT #P40 DOCUMENT ENTITLED 'MALE-TO-FEMALE TRANSMISSION	3
OF HUMAN IMMUNO-DEFICIENCY VIRUS' PUBLISHED IN THE JOURNAL	4
OF NAMA, 14/8/1987 BY NANCY PADIAN AND OTHERS TENDERED BY	5
MS MCDONALD. ADMITTED.	6
	7
Q. I'm not going to actually ask any questions about that	8
document, you can read it for yourself, but I just ask	9
that it be shown to the witness so there is no	10
misunderstanding about the documents being tendered.	11
A. Yes, I have it.	12
Q. The next one that you referred to is the 1991	13
Californian study.	14
A. Yes.	15
Q. Is that an article headed 'Female-to-male transmission	16
of human immunodeficiency virus'.	17
A. Yes.	18
EXHIBIT #41 DOCUMENT ENTITLED 'FEMALE-TO-MALE TRANSMISSION	19
OF HUMAN IMMUNODEFICIENCY VIRUS' PUBLISHED IN THE JOURNAL OF	20
NAMA, 25/9/1991 BY NANCY PADIAN AND OTHERS TENDERED BY	21
MS MCDONALD. ADMITTED.	22
	23
Q. The third study that you have referred to in slides 42,	24
43 and 44, was that one headed 'Heterosexual	25
transmission of human immunodeficiency virus in Northern	26

California'.	27
A. Yes.	28
EXHIBIT #P42 ARTICLE ENTITLED 'HETEROSEXUAL TRANSMISSION OF	29
HUMAN IMMUNODEFICIENCY VIRUS (HIV) IN NORTHERN CALIFORNIA:	30
RESULTS FROM 10 YEAR STUDY' PUBLISHED IN THE AMERICAN	31
JOURNAL OF EPIDEMIOLOGY, VOLUME 146 NO.4, BY NANCY PADIAN	32
AND OTHERS TENDERED BY MS MCDONALD. ADMITTED.	33
	34
Q. The next group of studies that you took us to related to	35
Uganda and we see a slide No.45 that refers to that.	36
A. Yes.	37
Q. Do you have that.	38

A. I don't have the paper.	1
Q. You have the slide. We are talking about the slide at	2
the moment.	3
A. One second.	4
Q. Just look at the slide for the moment. 45, that is	5
based on the study from the Rakai district of Uganda.	6
A. Yes.	7
Q. Will you look at transmission probability per coital	8
act.	9
A. Yes.	10
Q. The authors of this study are of the view that HIV is	11
sexually transmitted both from male to female and female	12
to male, aren't they.	13
A. Sorry.	14
Q. The authors of this study are of the view that HIV is	15
sexually transmitted from male to female and female to	16
male.	17
A. Yes.	18
Q. In fact, they conclude, on their studies, there is a	19
high probability of a female infecting a male than vice	20
versa.	21
A. Yes, which is totally unusual. We have studied both	22
this paper. The Padian prospective study and this	23
study, which is the best study published from Africa but	24
still it is retrospective, they calculated the	25
probability, the mathematical probability Padian asked,	26

of transmission, and as you see, that probability both 27
for the Padian study and from the Rakai study is in a 28
table - it is slide 46, and it tells you how many years 29
and how many contacts you have to have to have a 30
probability of 50% of being infected and of 95% of being 31
infected. In the Uganda study, the probability of 95% 32
of being infected, you have to have 27.4 years three 33
times a week unprotected sexual contact. 34

Q. May I just interrupt you there for a second. That is 35
not so, is it. You don't need to have sex that many 36
times to be HIV. You might have sex once and then be 37
diagnosed as HIV positive. It is Russian roulette, just 38

like Dr Padian says.	1
A. No, it can't be Russia roulette because nobody gives	2
that evidence. She wants probability and that's what	3
the Uganda study shows. She wants mathematical	4
probability. There is no way in evidence that you can	5
have - you can acquire a positive test just by having	6
one sexual contact. You would need evidence for that	7
and there is no evidence.	8
Q. What sort of evidence would you hope to find to support	9
that. What sort of evidence could you imagine that	10
there could be that could prove, in your terms, that one	11
sexual act could cause someone to become HIV positive.	12
A. You have to conduct a study. You have couples who have	13
only once sexual contact. Like, if they have syphilis,	14
there are so many couples who have only one contact and	15
it is not one - from one case, you can't deduce nothing.	16
You have to have a statistical probability and you need	17
a certain number of people, and then when you find out,	18
just by having one sexual contact, like, for example, as	19
with syphilis or gonorrhoea, again and again, then you	20
say one sexual contact is enough. There is no such	21
evidence for a positive antibody test. There is none.	22
Please give me such evidence and then I will accept it.	23
I cannot accept what people claim. I'm repeating that.	24
HIS HONOUR	25
Q. That is really a question of how you mathematically	26

analyse something, is it not. Because do you disagree 27
with Dr Padian's conclusion that you are playing Russian 28
roulette. Assuming that she is right about heterosexual 29
sex, do you disagree with her conclusion that you are 30
playing Russian roulette because one act can result in 31
infection. 32

A. I don't know what she bases that conclusion on because 33
there is no evidence, not on her study and not on any 34
other study. 35

Q. I think she bases her conclusion on the simple question 36
of mathematics. Just because there is one chance in 37
100, it doesn't mean that you have to have 100 contacts 38

before you are likely to be infected. You could be	1
infected by the first contact. That's just a matter of	2
logic.	3
A. Yes, I agree, but how often that would happen?	4
Q. That is another issue, but the question is: you are	5
playing Russian roulette.	6
A. First of all, you have to have evidence that it is	7
happening and then you have to find the mathematical	8
probability of it happening.	9
Q. I have assumed the evidence that it is happening. I	10
don't want to go over that ground again but if you	11
arrive at a situation where it can happen and assume	12
that it can happen -	13
A. Statistics are a lot -	14
Q. Yes, you can make of statistics what you will, can you	15
not.	16
A. I totally agree with you.	17
XXN	18
Q. You see, in determining whether you are more likely to	19
be the one person in the 100 who will contract HIV on	20
the first occasion, the factors that might be relevant	21
are other risk factors, like whether a person has an	22
STD, the form of sexual intercourse, all those other	23
factors.	24
A. You see, we have to have evidence. Please give me	25
evidence that this is happening first and then we will	26

discuss what are the parameters which lead to an 27
increased probability. First we have to have evidence. 28
Once we have that evidence, then we have to have 29
evidence, again evidence, data, which shows that X and Y 30
parameters lead to an increased probability. Once we 31
have that, we will discuss it. For the moment, we don't 32
have it. We don't have such evidence. 33
Q. Let's look at it this way. You have told this court 34
that you agree with the government's proposal to put \$10 35
million into safe a sex education campaign. 36
A. Yes. 37
Q. Do you think that should include a message that one time 38

is okay but don't do it too much more than that.	1
A. I said that's why we agree. We agree. We agree that we	2
have to have safe sex.	3
Q. Go back to the Uganda study. Was that slide based on an	4
article entitled 'Probability of HIV-1 transmission per	5
coital act in monogamous, heterosexual, HIV-1-discordant	6
couples in Rakai, Uganda'.	7
A. You are talking about the second of the study, slide 47,	8
because there are two Uganda studies.	9
Q. That might be my mistake. We are looking at slide 45.	10
A. Yes.	11
Q. What I want to know is in relation to that slide, was it	12
based on that article that I have just put to you.	13
A. Yes.	14
Q. This is an article entitled 'Probability of HIV-1	15
transmission per coital act' and so on.	16
A. Yes.	17
EXHIBIT #P43 PAPER ENTITLED 'PROBABILITY OF HIV-1	18
TRANSMISSION PER COITAL ACT IN MONOGAMOUS HETEROSEXUAL	19
HIV-1-DISCORDANT COUPLES IN RAKAI, UGANDA' PUBLISHED IN THE	20
LANCET VOLUME 357, 14/4/2001 BY RONALD GRAY AND OTHERS	21
TENDERED BY MS MCDONALD, ADMITTED.	22
	23
Q. Do you have a copy of that article in front of you.	24
A. Yes.	25
Q. 'Background' is the first entry: 'The probability of	26

HIV-1 transmission per coital act in representative	27
African populations is unknown. We aim to calculate	28
this probability overall and to estimate how it is	29
affected by various factors thought to influence	30
infectivity'. Do you see they set out there really what	31
they are trying to achieve.	32
A. Sorry?	33
Q. Do you agree they have set out there what they are	34
trying to achieve.	35
A. Yes.	36
Q. And what they are looking at is arriving at an overall	37
probability. That is what they are looking for, an over	38

all probability, aren't they.	1
A. That's what they are saying; overall probability.	2
That's what we are talking of.	3
Q. If you take the overall probability, what they want to	4
do is to estimate how that might be affected by other	5
risk factors.	6
A. Yes.	7
Q. The methods are set out and then the results.	8
A. Yes.	9
Q. And then at the bottom there is an interpretation	10
'Higher viral load and genital ulceration are the main	11
determinants of HIV-1 transmission per coital act in	12
this Ugandan population'.	13
CONTINUED	14
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E. PAPADOPULOS-ELEOPULOS XXN

In other words, what they're saying is if you have a
higher viral load - that is the HIV positive person has
a higher viral load - and there is genital ulceration,
then you're more likely to be at greater risk than the
average person in the population.

A. No, first of all - I am sorry but you have to go to the
basics. First of all, you have to show what is the
probability of the transmission which, in that case, is
very low, in both ways and very few patients - sorry,
individuals - are infected and it is a retrospective
study, the probability of transmission, it was very low.
How, from that small number of people then, could you
discriminate and come to the risk factors from a
retrospective study, I don't know.

Q. Are you looking for something.

A. No, I am waiting for you.

Q. Moving ahead, p.1152, the authors here found that HIV
was sexually transmitted, both from male to female and
female to male, didn't they.

A. They reported in their retrospective studies, people who
they thought they got a positive antibody test to sexual
transmission. For this interpretation, even a
prospective study, and especially in Africa where there
are so many other confounding factors of there being a
positive test, and they did not exclude any of these
factors to come to the conclusion that this is proof of

heterosexual transmission.	27
Q. One of the factors they excluded here, that you have	28
often pointed to in your evidence, is anal intercourse.	29
A. Yes, but it did not exclude - let me give you one	30
example which they could not and did not exclude. The	31
Essex study, the Kasarla study, in 1993, has shown that	32
more than 60% of patients with microbacteria	33
infections - and even their contact would have a	34
positive antibody test - would have a positive Western	35
blot pattern, which, even in Australia - when at that	36
time we had the most recent criteria - would be	37
positive. How do you know - this is one example - how	38

do you know that these people did not have a positive	1
test, it was either they had some microbacteria or they	2
had contact with people who had microbacteria infection.	3
In fact, Essex aims his study by saying that the ELISA	4
and Western blot are not sufficient to prove HIV	5
infection in Africa. How can you use the lava in	6
Western blot to prove sexual transmission in Africa is a	7
different question?	8
Q. The authors in this report make the observation, don't	9
they, that the results show a lower transmission as	10
compared to other countries, like Thailand and Kenya.	11
Go to p.1152, bottom of the left-hand column.	12
A. You first have to have proof. In this study there is	13
not proof of that transmission.	14
Q. The question is: the authors here come to the conclusion	15
that the rate of transmission in Uganda is less than	16
that that has been reported in Thailand and Kenya.	17
A. Yes.	18
Q. I'm drawing your attention to a passage at the bottom of	19
p.1151, on the left-hand-side.	20
A. Yes.	21
HIS HONOUR	22
Q. The last paragraph 'Ours and other estimates'.	23
A. Yes.	24
Q. That sentence commencing 'Ours and other estimates'.	25
Can you read that sentence to yourself.	26

XXN	27
Q. Do you agree that the authors there report that the rate	28
of transmission that they observed in Uganda is much	29
less than that reported from Thailand and Kenya.	30
A. That's what they say.	31
Q. Wasn't Uganda in a slightly unique situation for a third	32
world country at about the time this report was produced	33
in 2001.	34
A. What was that situation?	35
Q. Isn't it the case that HIV diminished in Uganda over the	36
1990s.	37
A. How?	38

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E. PAPADOPULOS-ELEOPULOS XXN

Q.	Do you know that's the case or not: yes or no.	1
A.	No. There are claims for that but there is no evidence.	2
	There are claims - in fact, they were talking about a	3
	miracle in Uganda and there is no such miracle.	4
Q.	Looking at Exhibit P5, the UN publication, p.17, at the	5
	top of the right-hand column under the heading 'East	6
	Africa' it reads 'Having diminished during the 1990s,	7
	Uganda's epidemic has stabilised overall'. Then it	8
	gives a national prevalence and then goes on to give	9
	some further details about the situation again in	10
	Uganda. You would disagree with that first proposition:	11
	that is that HIV diminished in Uganda in the 1990s.	12
A.	How? How?	13
Q.	Do you agree or disagree with that proposition.	14
A.	It says there so, but I am asking you where is the	15
	evidence and how that could have happened?	16
Q.	Do you agree or disagree with the proposition.	17
A.	I disagree.	18
Q.	The next Ugandan study is the one that you refer to in	19
	slide No.47; do you have that in front of you.	20
A.	Yes, I do.	21
Q.	The third to back page, slide 47 is in the bottom	22
	left-hand corner.	23
A.	That is an exert from our publication. That is what we	24
	concluded in the British Medical Journal.	25
Q.	Going back to slide 45, the one above it, you have	26

actually relied on two studies in relation to that	27
slide - one by Gray and one by Wawer.	28
A. Yes.	29
Q. Is the second of the studies that you relied on entitled	30
'Rates of HIV 1 transmission per coital act by stage of	31
HIV 1 infection in Rakai, Uganda, by Wawer and others'.	32
A. Yes.	33
EXHIBIT #P44 PAPER ENTITLED 'RATES OF HIV 1 TRANSMISSION PER	34
COITAL ACT BY STAGE OF HIV 1 INFECTION IN RAKAI, UGANDA,	35
AUTHORED BY MARIA J. WAWER AND OTHERS' TENDERED BY MS	36
MCDONALD. ADMITTED.	37
	38

Q. Before I started going through your PowerPoint 1
presentation and taking you to the individual studies 2
that you relied on for that presentation, I asked you 3
this question. I put to you at p.425, line 10: 4
'Q. I suggest not one author supports you in that 5
conclusion -' that's your views about HIV sexual 6
transmission. Your answer was 'A. Now, first of all, I 7
present the data. I believe in the data. Scientists 8
believe the data, not on their interpretation, the data 9
and that's what the data shows. Secondly, I would like 10
you to tell me where are the authors who deny their 11
findings? Q. I'll go back to the question: do you 12
agree -' and you cut me off and said 'I'd like you to 13
tell me - you say that I misinterpreted it, so I would 14
like you to tell me which are the authors who say that I 15
am misinterpreting their findings. Q. We'll come to 16
that in a moment. What I am asking you, first of all, 17
is a general question. Putting aside what use you make 18
of their data, what I am actually asking you is: do you 19
agree that not one of the authors of the reports that 20
you relied on for your presentation of sexual 21
transmission agrees with your conclusion that it is only 22
transmissible by receptive anal intercourse. A. Is not 23
my conclusion, is their conclusion. Q. It is your 24
conclusion. A. No, I put their conclusion. Their 25
conclusion is passive anal intercourse, passive anal 26

intercourse. All the studies in gay men and	27
heterosexual end up by saying passive anal intercourse.	28
It is not my conclusion, it is their conclusion.' Do	29
you agree that was your evidence.	30
A. Yes.	31
Q. I'm going to ask the same question again. Having been	32
through all of those studies now, can you point to one	33
author who supports you in your view that HIV is not	34
sexually transmissible.	35
A. If you agree with their data, they will always end up	36
with a conclusion that anal intercourse is the main risk	37
factor - in fact, they all say the only risk factor for	38

transmission. Their evidence - that is what they say in	1
their evidence.	2
Q. That is just not true -	3
A. Just give me the evidence. As I said before, give me a	4
paper which proves heterosexual transmission.	5
HIS HONOUR	6
Q. I understand your position that you interpret the data	7
in a particular way, but is there anything in any of	8
those papers in which you can point me to where the	9
authors say that passive anal sexual intercourse is the	10
only risk factor.	11
A. Well, I gave you the Australian study in gay men, where	12
it says the only risk factor is anal intercourse. Gallo	13
said it. Fraser said it, as well. There are authors	14
who say it is the only - the Kuchera review article,	15
they end up - if you read the five or six points they	16
put there, that is the only conclusion: that passive	17
anal intercourse is the only risk factor, so, yes, there	18
are many. They put different interpretation or a	19
different spin to the evidence but, as I say -	20
XXN	21
Q. This article by Fraser, this would be the letter to the	22
editor you were telling us about before.	23
A. Pardon?	24
Q. The article by Fraser that you just referred to, would	25
that be the letter to the editor, that has never been	26

peer-reviewed, that you have just told us about.	27
A. Yes.	28
Q. Isn't it the case that the studies in relation to male	29
circumcision in Africa lends some support for the	30
argument that HIV is sexually transmitted.	31
A. No.	32
Q. Did you read an article that was provided to you this	33
morning - one of those that professor -	34
A. Martin French -	35
Q. - French provided, headed 'The potential impact of male	36
circumcision on HIV in sub-Saharan Africa'.	37
A. Yes, there are many, it is not the first time we will	38

hear the claim that circumcision leads to reduction in	1
the frequency of a positive test.	2
Q. Did you read that article.	3
A. No, because I have so many things to read, I did not	4
read that. You did not give me that article. No, I	5
have not read that but it doesn't matter, you can ask	6
me. I have so much to read, I cannot read everything	7
but there is a valid explanation. We agree that	8
circumcision may lead to a decrease frequency or to a	9
positive antibody test.	10
Q. What is your theory about that.	11
A. The circumcision in the foreskin, there is material	12
there which is stigma. There is a material. That	13
material has been studied for a long time and it was	14
studied in relation to Jewish women having less cervical	15
cancer than a woman in another population. They were	16
trying to find an explanation and the conclusion was	17
that either it is due to a decrease of exposure to	18
stigma or a decreased exposure to semen. There are	19
other women who practice safe sex, I don't know exactly	20
the periods when they are not allowed to have sex, and	21
in some women this is a long time. They study to find	22
out what is the cause. There are very good experimental	23
studies, especially from Israel, where they show that	24
semen causes cancer and a study -	25
Q. You're saying there is an Israeli study that shows that	26

semen causes cancer .	27
A. Yes, semen - sperm causes cancer. They have sperm and	28
sperm causes cancer. They also studied the stigma - it	29
is not a laughing matter. In the study, they found out	30
that, yes, stigma causes cancer. They wanted to know	31
what is the cause of hygiene - could it be an infectious	32
hygiene? They found out it has a bacteria there - in	33
fact, a microbacteria there.	34
	35
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Q. Keep going.	1
A. There is a micro bacteria, that micro bacteria, as Essex	2
pointed out, have some sugars on their walls and these	3
sugars induce antibodies and these antibodies react with	4
the proteins which are found in their - which are in the	5
Western Blot, so I am not saying I have a proof of this	6
but there is an alternative explanation why circumcision	7
could lead to a decreased frequency of a positive test.	8
MS McDONALD: I tender that article.	9
EXHIBIT #P45 ARTICLE ENTITLED 'THE POTENTIAL IMPACT OF MALE	10
CIRCUMCISION ON HIV IN SUB-SAHARAN AFRICA BY BRIAN G.	11
WILLIAMS AND OTHERS, DATED 00/07/2006 AND PUBLISHED IN	12
VOL.3, ISSUE 7 OF PLOS MEDICINE TENDERED BY MS McDONALD.	13
ADMITTED.	14
	15
XXN	16
Q. Do you have that copy of your article in front of you.	17
A. No, didn't know that you were going to refer to it.	18
Sorry, I don't have it.	19
Q. It should be in the bundle of material attached to	20
Martyn French's most recent report.	21
A. I don't have it.	22
HIS HONOUR: Ms Papadopoulos can have mine. Just refer	23
to the copy that is being handed to you.	24
XXN	25
Q. You see there under the top heading 'Abstract' the	26

background to this particular paper, 'Randomised 27
controlled trial has shown male circumcision reduces 28
sexual transmission of HIV from women to men by 60% 29
offering an intervention of proven efficacy for reducing 30
the sexual spread of HIV. We explore the implications 31
of this finding for the promotion of male circumcision 32
as a public health intervention to control HIV in 33
sub-Saharan Africa'. That is what they set out there 34
A. That is what they say. 35
Q. Then the view of the authors involved in putting 36
together this detailed report, this finding that is in 37
relation to male circumcision was relevant to the 38

question of sexual spread of HIV correct.	1
A. Yes.	2
Q. In fact if you go to p.1037, there is a diagrammatical	3
representation of the proportion of men from the	4
different areas of Africa who are circumcised and then	5
that is juxtaposed against a diagram of Africa showing	6
the different areas in which HIV is more or less	7
prevalent. Do you see that, A and B.	8
A. Sorry? You wanted to refer to figure 3?	9
Q. I am looking at p.1037, the top.	10
A. 1037, yes.	11
Q. Top left-hand corner, there are four drawings of the	12
country of Africa.	13
A. Yes.	14
Q. We see A marked on the first one and B on the second	15
one.	16
A. Yes.	17
Q. Go down to the information about what that represents.	18
Suggests that A shows the proportion of men who are	19
circumcised in the different areas of Africa.	20
A. Yes.	21
Q. And B, the second diagram of Africa, shows the	22
prevalence of HIV in those same areas.	23
A. Yes.	24
Q. Clearly a correlation between those two diagrams.	25
A. Between A and B?	26

Q. Yes.	27
A. I can't see a correlation.	28
Q. I suggest if you look at that pictorial there a	29
correlation, not exact, but a correlation.	30
A. I am sorry, but there is not a correlation.	31
Q. That is what the authors of the report found.	32
A. They may say, but it is not a correlation.	33
Q. Did the authors of this report conclude, now referring	34
back to the front page under the heading 'Methods and	35
Findings' second paragraph: male circumcision could	36
avert 2 million, between 1.1 and 3.8 new HIV infections	37
and .3, the range of .1 to .5 million deaths over the	38

next ten years in sub-Saharan Africa.	1
A. All speculation, I can't call it anything else than speculation.	2 3
Q. This isn't speculation, I ask you to assume that in recent years the expectancy for life in South Africa has dropped dramatically. In 1980 life expectancy was about 57 years. In 2004 that had plummeted to 45 to 50 years.	4 5 6 7
A. There is no such evidence by statistics. Please don't laugh when I say something because this is not a laughing matter. Now, this was - we had a meeting in South Africa, in fact two meetings, one in Pretoria and one in Johannesburg. We refused to go to the first meeting but went to the second which was in Johannesburg. In both meetings the specialists from South Africa were asked repeatedly to come with evidence that there is a reduction on life expectancy in South Africa; one. Secondly, that the reduction was due to HIV infection. They never could come with such evidence, nor could the statistics, the Department of Statistics in South Africa, so, no, there is no such evidence.	8 9 10 11 12 13 14 15 16 17 18 19 20 21
Q. Let us assume that that is correct. I ask you to assume.	22 23
A. And if it is - sorry, may I interrupt, even if it was, you cannot attribute that to HIV. There is so many over factors in South Africa who could refer to such an	24 25 26

event. 27

Q. I go back to asking the question. 28

A. Sorry. 29

Q. If you assume that in fact it is actually correct that 30
the information collated shows that the life expectancy 31
in that 24 year period has plummeted from 57 years to 32
between 45 to 50 years. 33

A. There is no evidence. 34

Q. I am asking you to make an assumption and then let me 35
finish the question. Assume that is correct. 36

A. I can't. 37

Q. Do you have a theory as to why that might be. 38

A.	No, I can't assume, and I have a theory, in South Africa	1
	there are so many other reasons, the life - they still	2
	don't live in abundancy, there is big poverty, there is	3
	big crime. You know, you cannot say because of that	4
	that there is no evidence, so I can't assume, if you	5
	don't have evidence you cannot assume.	6
Q.	In courts experts are often asked to assume certain	7
	facts. That means for the purpose of the question you	8
	are to assume those facts. So I want you to assume	9
	right now that it can be proved the life expectancy in	10
	South Africa has dropped from 57 years to between 45 and	11
	50 years. Do you have an alternative explanation for	12
	why that is.	13
A.	I don't have to have an alternative explanation if this	14
	is - this is not the case.	15
Q.	Because a couple of things you have just mentioned:	16
	poverty, crime, other illnesses in South Africa they	17
	have all been constant. Poverty has been a problem in	18
	South Africa since long before 1984.	19
A.	Yes, it is still now and even more, there are drugs now,	20
	a lot of drugs taken in South Africa, there is crime,	21
	there are things which before did not exist. So much	22
	crime now which they don't know how to control it. As I	23
	said, it is all speculation. Not speculation, there is	24
	no evidence that - in fact I will find out what is the	25
	population in South Africa now and what was then. They	26

don't have statistics, so I cannot even find it if I 27
want. They do not have. They still don't have 28
statistics. They have department which is called I 29
think South African Statistics, it is called SASTATS. 30
Q. In other in your evidence you have referred to 31
tuberculosis and even haemorrhoids as being possible 32
explanations for why people are dying in South Africa. 33
Haemorrhoids and tuberculosis were in South Africa well 34
and truly before 1984. 35
A. Where do I say people in South Africa die from 36
haemorrhoids? They die from tuberculosis of course. 37
Q. His Honour can go - 38

A.	When did I say they die from haemorrhoids?	1
Q.	His Honour can look at the transcript. What I am	2
	putting to you is both haemorrhoids and tuberculosis from	3
	were present in South Africa long before 1984. Simple	4
	question. Both tuberculosis and haemorrhoids were	5
	present in South Africa before 1984.	6
A.	Yes, of course.	7
MS MCDONALD:	What I am proposing to do for expediency	8
	is Martyn French annexed to his statement a number of	9
	articles that he may talk to during the course of his	10
	evidence.	11
HIS HONOUR:	Yes.	12
MS MCDONALD:	What I flagged with my friend Mr Borick	13
	was that I propose to simply ask Ms Papadopoulos out of	14
	fairness to her whether, having read those articles, she	15
	has any particular comment she wants to make or passage	16
	that she wants to draw to your Honour's attention. I	17
	raise that now, given some of Ms Papadopoulos's answers	18
	up until now, I am not sure if she has read the other	19
	articles or not.	20
A.	It is impossible. It is physically impossible to read	21
	so many articles when they are given to me at the	22
	moment. You know, you gave me so many articles before	23
	lunch how can I read them all?	24
HIS HONOUR:	You go ahead and put the bundle in and if	25
	Ms Papadopoulos needs some time to go off and read these	26

articles, I think she ought to be given that	27
opportunity. I mean, it is not a simple exercise.	28
MS MCDONALD: I accept that.	29
HIS HONOUR: Then given an opportunity to comment on	30
them or any parts of them if she thinks it is necessary	31
to do so.	32
XXN	33
Q. Have you read any of the studies that you were given	34
this morning.	35
A. I read - I read the general practices, the principles	36
epidemiological studies. The causation, I did read	37
that. I read part of the - the sequence-based	38

identification of microbial carcinogens: reconsideration	1
of Koch postulates.	2
XXN	3
Q. The articles I want to just draw your attention to are	4
those that were provided by Martyn French, the ones we	5
have just been talking about in relation to circumcision	6
is one of the bundle. The others are an article headed	7
'Mechanisms of hypergammaglobulinemia and impaired	8
antigen-specific humoral immunity in HIV-1 infection'	9
authored by DeMilito and others.	10
A. Yes.	11
Q. Do you have that one.	12
A. Yes.	13
Q. Have you read that.	14
A. No.	15
Q. 'Persistent immune activation in HIV-1 infection is	16
associated with progression to AIDS' is the next	17
article.	18
A. Yes, I read that one.	19
Q. By Hazenbourg.	20
A. I read this one.	21
Q. I am not going to ask you any particular questions about	22
this article what I want to do is give you an	23
opportunity to put anything to his Honour that you want	24
to put about this article or draw him to any particular	25
passage.	26

A. No.	27
Q. I am giving you an opportunity if there is something you	28
like to say about.	29
A. Thank you very much. Let me read what, if I have it	30
here, what Professor French says about this article.	31
Q. I am giving you an opportunity for you to comment on	32
this article, not to go off and look at what other	33
people have said.	34
A. No, I am going to comment. I will give my	35
interpretation and give his interpretation, that is a	36
comment.	37
Q. Leave him to give his interpretation. I am asking you	38

is there anything that you want to draw his Honour's 1
attention to in that article or is there anything you 2
want to say to his Honour about that article. 3

A. Yes. I won't say, I won't make any comments, no. 4

Q. Nothing you want to. 5

A. Not at the moment. 6

HIS HONOUR: Well, Ms McDonald, I know you are trying 7
to shortcut this, but I assume if Ms Papadopoulos has a 8
difference of opinion with Professor French then I ought 9
to know what that difference is otherwise I am going to 10
have his evidence and she has not been really given an 11
opportunity to make whatever points she wants to make 12
about it. That is the difficulty, isn't it. 13

MS MCDONALD: Not really. Ms Papadopoulos knows there 14
is some live issue about this article, she can tell your 15
Honour what her interpretation is. 16

HIS HONOUR: If she wants to refer to - I gather she 17
has read Professor French's statement or report upon 18
which the prosecution intend to rely. I would have 19
thought she is entitled to take me to any passage of 20
that that she disagrees with or has a different 21
interpretation about and indicate that to me and why. 22

MS MCDONALD: If that is as far as it is going to go, I 23
don't have a problem with that. Past experience has 24
shown it goes a lot further. 25

CONTINUED 26

27
28
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E. PAPADOPULOS-ELEOPULOS XXN

MR BORICK: I have had a discussion with 1
Ms Papadopulos about the statement that was received 2
from Professor French and I think part of our discussion 3
is what is troubling her at the moment and I, for one, 4
am not sure quite what use Professor French makes of 5
this publication. It is not marked in his report. 6

HIS HONOUR: I suppose the other alternative, 7
Mr Borick, is one that I have been trying to avoid - I 8
suspect trying to avoid for the benefit of your 9
witnesses, apart from anything else, and it may be 10
unavoidable - is that once Professor French has given 11
his evidence and been cross-examined - 12

MR BORICK: Please don't say it anyway. I know what 13
you are referring to. 14

HIS HONOUR: Ultimately I have to work on the evidence 15
that is presented to me, so if there is a genuine 16
challenge of something, I need to know where that 17
challenge is coming from and the basis of it. I 18
understand the difficulty everyone is faced with, but 19
probably the more desirable way of doing it is the one I 20
have just been referring to. 21

MR BORICK: Has your Honour got Professor French's 22
document there? 23

HIS HONOUR: Yes, I have. 24

MR BORICK: Have you read the last sentence in the 25
first paragraph. 26

HIS HONOUR: I don't profess to have studied this. 27

MR BORICK: I just want to you look at that because 28
you have already read it. 29

HIS HONOUR: I just want to make sure I am looking at 30
the same document. It is the one that commences 31
'Defence expert witness proposes'? 32

MR BORICK: No 'Recent data ... disease'. All the 33
other documents or research papers were attached to 34
this. 35

HIS HONOUR: Yes, I have that document. That has just 36
been handed to me. What would you like me to read? 37

MR BORICK: Nothing more, just because he hasn't 38

given his evidence yet, but just the last sentence in 1
the first paragraph, 'It would therefore'. 2

HIS HONOUR: Yes. 3

MR BORICK: It is a very significant statement by the 4
use of the word 'caused' and I think what I would like 5
to do, because I have had a discussion with her about 6
that, I would like at least a 10 to 15 minute 7
adjournment to decide whether she wants to refer to that 8
in-chief or leave it to see what Professor French really 9
means by that, because clearly he hasn't told us what 10
the other factors are. Could I have a 10 or 15 minute 11
adjournment, your Honour? 12

HIS HONOUR: Yes, we have been going for over an hour, 13
so I am happy to have a 10 minute adjournment. 14

Ms McDonald, you don't object to that? 15

MS MCDONALD: No. 16

ADJOURNED 3.24 P.M. 17

RESUMING 3.47 P.M. 18

MR BORICK: Can I pose this: as I understand it, 19
Ms McDonald wants to cross-examine her on some of the 20
material provided by Professor French and also the 21
material provided by Professor Dwyer. I think with 22
regard to Professor Dwyer, we can move along quite 23
smoothly, I think. The only difficulty with regard to 24
Professor French is she still hasn't had a chance to 25
read a couple of the articles. Our preference would be 26

for her to be able to make her comments on the factors 27
referred to by Professor French dealing with the 28
Rodriquez article which she has read and commented on 29
and understands what he is saying. Then in the second 30
paragraph of his report, the reference to Hazenburg. So 31
that would just leave for tomorrow morning the other 32
part of it. I think that could work and would save us a 33
bit of time. 34

HIS HONOUR: Ms McDonald? 35

MS MCDONALD: I am happy to come back to all of 36
Professor French's material when we get through the 37
other topics. 38

XXN	1
Q. I want to go back to a document that I drew your	2
attention to before. It is P38, the article headed	3
'General Practice'. Do you have that in front of you.	4
A. Yes.	5
Q. Have you read that over the luncheon adjournment.	6
A. I read it.	7
Q. And you recall your evidence yesterday that I have put	8
to you about the role of epidemiology in science.	9
A. Yes.	10
Q. Do you maintain, having read this article, that	11
epidemiology has no role to play in the determination of	12
disease causation.	13
A. I said epidemiology cannot prove causation.	14
Q. But epidemiology combined with other information can	15
prove causation.	16
A. If the information are good, yes. If the information	17
are no good, if the other data is no good, you can't.	18
If the epidemiology use other evidence, yes, and I said	19
epidemiology, if you have antiretrovirology is good,	20
then you are right. You have to prove the existence of	21
HIV, first prove the existence of HIV, and then you do	22
the epidemiology for HIV.	23
Q. But epidemiology can play a role in determining the	24
cause of something, as one of the factors looked at	25
together to draw a conclusion as to the cause of	26

something.	27
A. Epidemiology can only prove correlation. Correlation is	28
not proof of causation.	29
Q. It can be part of the proof of causation.	30
A. Yes, but you have to have other evidence.	31
Q. And there are some examples in this article of where	32
epidemiology has played a very important part.	33
A. Yes, I'm not saying that it cannot play a part, but it	34
is not proof of causation.	35
Q. An example that the author has used at p.97 is	36
congenital rubella syndrome.	37
A. Yes, there are ways when you see something has happened	38

and it doesn't happen any more. Yes there are, but we	1
are talking about general, in science, epidemiology	2
cannot prove, cannot.	3
Q. Where did you get that from, when you say -	4
A. I didn't say part of proof. I said cannot prove.	5
Epidemiology only can show causation. That cannot	6
prove - sorry, epidemiology can prove only correlation.	7
Cannot prove causation.	8
Q. Is your position this: epidemiology, of itself, if you	9
have got nothing else, cannot prove causation, but it	10
can be part of the bigger picture that proves causation.	11
A. Of course.	12
Q. Do you accept that.	13
A. Of course.	14
Q. It is contrary to your evidence yesterday, which was far	15
more stark than that, which was it has got no role to	16
play in proving cause.	17
A. Maybe I used the wrong word, but I said it cannot, I'm	18
repeating, maybe I used the wrong word, but I said it	19
cannot prove causation. It cannot prove caution.	20
Q. I want to turn to the issue of isolation and what you	21
have referred to as 'isolation'. Do you agree with this	22
proposition: 'The point of isolation of almost anything	23
is not to make it pure from all other things, but only	24
to separate it from other things with which it can be	25
confused'.	26

A. Sorry?	27
Q. Would you like me to say it again.	28
A. Yes, please.	29
Q. 'The point of isolation of almost anything is not to	30
make it pure from all other things, but only to separate	31
it from other things with which it can be confused'.	32
A. Which is it can be -	33
HIS HONOUR	34
Q. With which it can be confused.	35
A. Did I say that?	36
XXN	37
Q. Do you agree with that proposition, or do you disagree.	38

A. I don't know if I say something like this, I may have
said it, but when I said it I meant to separate - for
example, if it is a virus, because a virus - I think I
elaborated there, or somewhere - because the virus
contains proteins, nucleic acids, you have to separate
from everything else which has nucleic acid and has
proteins. You won't be able to know which is viral
protein and which is non-viral, or which is viral
nucleic acid and which is not viral nucleic acid. You
don't have to separate from water.

XXN

Q. I will go back to the question. I'm not suggesting that
this is a statement made by you. I am reading to you a
simple proposition and I want to know if you agree or
you disagree with this proposition. Simple question.
'The point of isolation of almost anything is not to
make it pure from all other things, but only to separate
it from other things with which it can be confused'.

A. I don't know - confused, exactly. It isn't confusing if
you have the other things. I don't know what is so - I
cannot understand what you want to mean by this.

HIS HONOUR

Q. All that is being asked of you is whether you agree with
that proposition. It is a very common question to ask
an expert, whether they agree with a general
proposition. It is not -

A.	But the way I expressed myself there.	27
Q.	No, no, that is not your expression. It is a	28
	proposition that is being put to you. Nobody said it	29
	was your proposition.	30
A.	No, I thought it was mine.	31
Q.	No, what is being asked of you, this is a proposition	32
	that is being put to you and you are being asked whether	33
	you agree with that proposition.	34
A.	Sorry, your Honour. I thought I said this thing. I	35
	thought 'How did I say it?', you know, or I expressed	36
	myself wrongly.	37
Q.	Can we go back. Do you understand what the proposition	38

was.	1
A. Now I understand.	2
Q. The question is: do you agree with it or disagree with	3
it.	4
A. What is the last word, please?	5
XXN	6
Q. 'Confused'.	7
A. Confused, what do they mean by 'confused'? You have to	8
elaborate what is meant by 'confused'. If by 'confused'	9
you have other material there which have the same	10
composition, for example, as you say, if it is a virus	11
and you want to identify the viral protein and the viral	12
RNA, then you must have it separate from everything else	13
which has RNA or protein. You can have water there, you	14
can have sugar, you can have lymphocytes, but you	15
cannot - for example, you cannot have cellular	16
fragments, you cannot have other viruses there.	17
HIS HONOUR	18
Q. Can I stop you for a moment. Based upon the answer you	19
have just given, it would appear to me that subject to	20
understanding the word 'confused', you would agree with	21
the proposition.	22
A. Yes.	23
Q. That you can have other material, but as long as the	24
purpose is to isolate material from other material from	25
which it could be confused.	26

A. Very well said, your Honour. Thank you very much. You	27
have to specify what 'confusion' is.	28
Q. These are general propositions.	29
A. Sure.	30
Q. And if Ms McDonald wants to be more specific, she will	31
be.	32
XXN	33
Q. So is it your position that as long as the other	34
materials don't prevent you from looking at what it is	35
that you wanted to see in isolation -	36
A. No, not from looking, it's not from looking. It's	37
having other things which confuse your findings, not	38

from looking. 1

Q. I'll ask the question again, and if you would let me 2
finish it this time. So do you agree that in terms of 3
isolation, the thing that you are trying to isolate 4
doesn't have to be pure from all other things, only 5
those things that may cause difficulty in examining or 6
considering the component you are trying to isolate. 7

A. Yes. 8

Q. An example you have touched on is water. In science, it 9
is not necessary to prove on each occasion that water is 10
100% pure with no dissolved gases from the atmosphere or 11
traces of silicone from the glass beaker the water is 12
contained in, is it. 13

A. You cannot call it pure water if you have all these 14
things in there. 15

Q. It is ordinarily accepted in science that when water is 16
used that that doesn't necessarily exclude there being, 17
for example, dissolved gases from the atmosphere. 18

A. If you have the gases dissolved in your water, you are 19
not going to call it - if you have hydrogen sulphate 20
there, you are not going to call it pure water, but if 21
you give that water you have with a high concentration 22
of hydrogen sulphate there, you will kill the patient 23
with pure water. 24

Q. So you disagree with the proposition I just put to you. 25

A. You cannot call it pure water with gases in. You cannot 26

call water with gases dissolved in it pure water.	27
Q. Do you accept that there is evidence that proves the	28
existence of the HTLV-(i) virus.	29
A. No.	30
Q. You don't.	31
A. No.	32
Q. Do other members of the Perth group accept that.	33
A. Yes.	34
Q. But you don't.	35
A. No.	36
HIS HONOUR: There might be confusion in the question.	37
Can you just clarify the question, Ms McDonald?	38

XXN	1
Q. So you do not accept that there is evidence of the proof	2
of the existence of HTLV-(iv).	3
A. No, but what does it have to do with HIV, can you tell	4
me?	5
Q. You answer the questions.	6
A. We're talking here about the case which is a court	7
case - I don't know, I'm asking, I don't know the rules.	8
HIS HONOUR: Ms McDonald asks the questions, you just	9
answer them. Whether they have got any relevance or	10
whether they are going to help me at the end of the day	11
will be a matter for me. If they are totally	12
irrelevant, or if Mr Borick thinks they are	13
objectionable, he will be on his feet, all right. That	14
is his job. Ms McDonald is to ask the questions and	15
your job is to answer them, and don't try to foreshadow	16
why she is asking them, because they may be relevant,	17
they may not be at the end of the day.	18
XXN	19
Q. Do you accept there is evidence that proves the	20
existence of the HTLV-(i) virus.	21
A. I say no.	22
Q. Are there other members of the Perth group who accept	23
that the HTLV-(i) virus has been proved to exist.	24
A. No.	25
Q. Because that virus hasn't been isolated in the way you	26

define 'isolation' either, has it; that is, absolutely 27
free of any cellular debris. 28

A. No, no. In fact, for that virus we don't have a picture 29
at all. The only picture we have is HL23V, which was 30
meant to be the first human virus and it is not a virus 31
at all now. 32

Q. But didn't you accept only a day or so ago that you 33
don't actually need a picture to prove a virus. 34

A. No, you need the viruses. Viruses are particles. I 35
said if we accept the definition of 'viruses' as being 36
particles, then you have to have a particle. How 37
otherwise you going to prove it? Now, there may be 38

other viruses that may be not retroviruses. HTLV-(i) is	1
meant to be a retrovirus. HL23V was meant to be a	2
retrovirus and, as I said, there is a difference, a very	3
big difference, between other viruses and retroviruses.	4
So you cannot say you have a retrovirus if you don't	5
have a picture, and you cannot say you purify it, as you	6
gave me the document, you've got to purify it, and if	7
you don't purify, you cannot identify the retroviral	8
proteins and the retroviral RNA.	9
Q. When you talk about 'isolation' and you say isolation	10
means you have to separate the virus from any other	11
cellular - let me finish please - any other cellular	12
material, upon what do you base that standard. Where do	13
you get that from.	14
A. From the document you gave me. Here it is. This is	15
your document, it is not mine. I am repeating it.	16
HIS HONOUR: That's P4.	17
XXN	18
A. You gave me the document and there you say you have to	19
have -	20
XXN	21
Q. I will come back to that document, because I suggest it	22
doesn't say what you are putting to this court, but I	23
want to go back a step. You expressed this view a long	24
time before that document was handed to you in court.	25
On what do you base that view that the criteria of	26

something being isolated involves physically separating 27
it out from any other sort of cellular particle or 28
fragment. 29

A. 'Isolation' means to obtain something separate from 30
everything else. That's what isolation is. If you look 31
in the English dictionary or Oxford Dictionary or 32
Australian Oxford Dictionary, or anywhere you look, 33
isolation - by 'isolation' is meant to obtain a 34
substance separate from everything else. 35
36
37
38

Q. Everything.	1
A. That's how it is defined in the Oxford dictionary; to	2
state a substance. They specified in the Oxford	3
dictionary, for example, a substance separate from other	4
things.	5
Q. Is that how you personally define it; that 'isolation'	6
means separating it out - that is the virus out - from	7
absolutely everything else.	8
A. I said separation - we cannot separate from air. You	9
cannot separate. If you take an electro-micrograph,	10
most probably you will have something else there but it	11
is not something which contains - if you claim to have	12
separated, to have isolated, to have purified a	13
retrovirus, you have to have a picture which shows only	14
the retrovirus particles and nothing else.	15
Q. We will go back to the question again and see if we can	16
get an answer this time. When you use the term	17
'isolation' - when you use it, not what the dictionary	18
says - do you mean the virus has to be separated out	19
from absolutely everything else.	20
A. Yes. That was the meaning of, the use of the word	21
'isolation' from our publications.	22
Q. Upon what do you base that. By that, I mean this: when	23
you are using that as a scientific standard, where do	24
you get that from.	25
A. I got it - here it is. 'Isolation' means purification	26

and here it is. You gave it to me. These are the	27
scientific findings you gave to me.	28
Q. Put that down and I will go back to the question I asked	29
you before. You expressed this view long before I	30
handed you that document. On what basis do you use that	31
as a scientific standard.	32
A. I repeat, in 1973 they had a meeting at the Pastel	33
Institute; just one example, at the Pastel Institute.	34
In fact, the secretary was the second author of the	35
Montagnier study, what is called the Montagnier study	36
1983, and the principal author gave her paper there, I	37
think they co-authorised it, and that's where it was	38

discussed what is - what you must have to ever claim 1
purification. You must have an electromicrograph which 2
shows nothing else - I repeated it so many times - which 3
shows nothing else but particles of the same morphology. 4
It is not me, and this is all in the biological books. 5
That's what I said, you know. There are plenty of 6
biological books where they show pictures of viral 7
purification, isolation. 8

Q. We will go back to what I put to you just a moment ago 9
when I asked you this. I will put to you a passage: 10
'The point of isolation for almost anything is not to 11
make it pure to all other things but only to separate it 12
from other things with which it can be confused'. That 13
is different to saying, for isolation, the virus has to 14
be separated out from absolutely everything, isn't it. 15

A. Absolutely everything which is - which has the same 16
composition as viruses. 17

Q. But you didn't say that a moment ago. You said 18
'isolation' means to be separated from everything. 19

A. Yes, from everything else. Which, if I say you have a 20
substance here separated, it is isolated, it is 21
purified, or here I have water. Now, I have to say, if 22
I call this purified water, I must be sure that there is 23
nothing else there but water. If it is, it should be - 24
the contamination should be extremely small. That's 25
what you have all the time in the laboratories. All the 26

chemicals which are used as reagents in the 27
laboratories, they tell you purity and they tell you 28
what else is there. It should be very, very small but 29
they will tell you, so yes, you have to have it. You 30
cannot say that you have a pure virus or an isolated 31
virus if there you have similar cellular fragments, you 32
have other viruses, you have bacteria fibres or still 33
cells. You cannot call it pure. 34

Q. Let's go back to the question. There are two different 35
things we have been talking about here. What I want to 36
establish is which is the definition that you use for 37
'isolation'. On the one hand, there is that passage 38

that I have put to you a number of times now about 'the 1
point of isolation of almost anything is not to make it 2
pure from all other things but only to separate it from 3
other things with which it can be confused', or do you 4
say isolation involves separating the virus out from 5
absolutely everything. 6

A. Isolation of a virus, which is the same thing as far as 7
we are concerned with purification, synonymous with 8
purification, it means to obtain the virus particles 9
separate from everything else which contains proteins, 10
which contains the same composition as the virus. That 11
is including proteins and RNA. 12

Q. I just want to go back to your reference to I think it 13
was the 1973 Pasteur meeting. 14

A. Beg your pardon? 15

Q. The Pasteur meeting, 1973. 16

A. Yes. 17

Q. You gave some evidence about that. 18

A. Yes. 19

Q. That meeting preceded the development of molecular 20
techniques, didn't it, since that time, since the 21
Pasteur meeting. 22

A. Yes. 23

Q. Molecular techniques have. 24

A. Yes. 25

Q. Can you indicate to the court what you understand about 26

the use of molecular techniques to identify and speciate	27
viruses as distinct and unique entities.	28
A. I still did not get your second - 'to identify viruses	29
and to speciate', is that the word you used?	30
Q. Yes, speciate viruses as distinct and unique entities.	31
A. Yes.	32
Q. What is your understanding of the use of molecular	33
techniques in that process.	34
A. You cannot use molecular techniques. Your Honour, it is	35
a little bit hard to explain. Maybe an example will	36
happen. I don't know if it is the right example but I	37
will try. Please correct me if it is not the right way.	38

When you do a paternity suit - I'm saying the word 1
correctly? 2

HIS HONOUR 3

Q. In terms you see it, yes. Fortunately, we don't do them 4
very often; 'when you do a paternity suit -' 5

A. When you do a paternity suit, that is a molecular 6
technique. You use the DNA from the man, from the 7
father, and you try to find out if there are some 8
children which have the same DNA. 9

Q. A DNA profile I think we call it. 10

A. Yes, but the most basic requirement to do this is to be 11
100% sure that the DNA came from the father on the one 12
hand and the DNA came from the children. That is the 13
most basic requirement. If you don't have this 14
assurance, you cannot continue. Any other molecular 15
techniques is useless. So how do you obtain the DNA 16
from the father and the children? By injection. Just 17
put an injection there. You get the blood count, you 18
get the cells, break the cells and get the DNA from the 19
father's blood and from the children's blood and then 20
you compare them. Then you do the molecular technique, 21
you use the molecular techniques. Now, HIV, to use 22
molecular methods for HIV, or again, like the paternity 23
suit, the most basic requirement is to have the HIV RNA. 24
Once you get the HIV RNA, then you can do any of the 25
studies and try, for example, to find the same RNA, or, 26

if you want, you can take the DNA, the complementary DNA 27
to this RNA, and you look with these RNA or DNA from the 28
virus to find out if you have - like for the children, 29
to find out if you have it in other tissues, in other 30
human beings or in other animals, the same thing. Now, 31
the most basic requirement is the same principle. The 32
most basic requirement is to have the RNA from the virus 33
but you cannot put a needle in the virus and get the DNA 34
out from there because it is too small, the virus 35
particles are too small, and you cannot it get from one 36
single virus particle. So the second best way to do it, 37
and that is what it says here in 4, what it is called, 38

it says the only other way to do it is to purify the virus. In fact, it tells you here not only that it is absolutely necessary to purify the virus before you identified the viral RNA proteins, it tells you what method is used to purify viruses, and then it says you can use this RNA or this DNA - if there are other viruses, then they are not retroviruses and only then you can use these DNA or RNA to do molecular studies, viral molecular studies. If you don't have this purification and if you don't have proof that that RNA came from the virus particles, all the other techniques and all the efforts are a waste of time and money. So, let's see what is the origin of the HIV RNA, of the RNA which is used to do all this other molecular HIV studies, or, as we presented in our evidence, in 1983 Montagnier and in 1984 Gallo claimed to have purified HIV but they did not publish any evidence for the purification and, in fact, as we know, Montagnier, in 1997, said that in his purified virus he did not even have retrovirus particles. In fact, there were only cellular fragments, and his electromicroscopist, the person who has done the study, he admitted that they had only cellular fragments. We don't know - he also said, because he was asked if Montagnier purified the virus - Montagnier was asked if Gallo had purified HIV and he says 'I do not know. I don't believe so'. So, how was

the HIV/ RNA, where did this HIV/RNA which we are using 27
now for all this molecular study came from? What they 28
did is to find in this what they called 'purified HIV', 29
to find out a special form of RNA. Now, I don't know if 30
I have to explain what is RNA. 31
Q. I think that's been explained. 32
A. That's been explained. 33
CONTINUED 34
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The RNA is made of four blocks. They found there, in 1
what they call a purified virus, they had RNA which had 2
a tail, which is reach anatomy, so it is called 3
polymerise RNA, so they found the polymerise RNA and 4
they said 'This RNA is HIV RNA, is the HIV genome', but 5
this cannot be. It is not possible. There are many 6
reasons but let me give you only two. One, they do have 7
proof of purification, that where they got it from, it 8
was only virus and nothing else - in fact, they said 'We 9
know now that was not the case'. Secondly, polymerise 10
RNA is not specific to retroviruses - in fact, as far 11
back as 1972, Gallo has published a paper where he said 12
he has shown - it was not only him that did this, there 13
was others - which has shown from animal retroviruses 14
that were purified, they contained polymerise RNA and 15
they said maybe they could use this for proof of 16
retroviruses but he admitted that the polymerise RNA is 17
not specific to retroviruses. Polymerise RNA can be 18
found in all cells. In fact, if we don't have 19
polymerise RNA in our cells, we don't have proteins. 20
This RNA is the RNA which is used to make proteins. He 21
obtained RNA from a material which definitely had cells 22
and called it HIV RNA, called it HIV RNA, and this is 23
the origin. Using this RNA and quality HIV RNA, then 24
they tried to find this RNA using molecular probes, 25
molecular techniques to find this RNA initially, of 26

course, in AIDS patients - in fact, to do exactly what 27
is done in paternity suit but they could not find it. 28
They just could not find this RNA or DNA, if you want - 29
fundamentally DNA - even in AIDS patients. In fact, 30
they could not find it even in the T4 cells. Gallo 31
admitted, he published this paper and was the principal 32
author and they said 'Hybridisation bands are very faint 33
and may be due to other things'. Then in 1994, he 34
admitted, in fact, they could not find any HIV RNA or 35
DNA in - he said 'I admit we did not find HIV DNA in T4 36
cells'. There were many other studies and nobody could 37
find it. In not finding it, the whole thing - in fact, 38

the HIV and the HIV theory would have ended there, but 1
then, ironically, Kary Mullis came and found a chain 2
reaction and salvaged the HIV genome. With the 3
preliminary chain reaction, the first paper was 4
published in 1987 but what they say there, and Professor 5
McDonald, 'We are not wrong. We are correct in saying 6
this'. The preliminary chain reaction, you use only 7
small parts of the RNA - very small parts - and you look 8
to find out if the same bits are found in other cells 9
and in other tissues, in AIDS patients. They tried that 10
and, even though that was very hard to find, they were 11
finding it in some patients and not in others. When 12
they were finding it, if they use one probe, they will 13
find it, if they use another probe, they are not going 14
to find it. It was going for so long and still now 15
these techniques are still being used - preliminary 16
chain reaction - which does not give you the whole HIV 17
genome. You find only pieces there and I have a comment 18
on this that says how hard it is to say this proves HIV 19
infection. The most important thing to hear is, when 20
using probes, something which did not originate - when 21
calling something HIV RNA or HIV DNA for which you do 22
not have proof that it originated from a virus 23
particle - in fact, all the evidence is that this HIV 24
RNA or DNA came from cells. But then why - there is 25
claims here that Professor McDonald in his later thing 26

said 'It is unique, it is not found anywhere else. It 27
is only found in these patients.' That is not true. In 28
fact, when Gallo and Montagnier could not find it by 29
ordinary hybridisation, even in the T4 cells, it was 30
Professor Robin Weisz, in London, who has found the 31
whole gene in 1985, or in people who had low-level of 32
gamma globulins. I always found it in people with grave 33
disease but there was still people that found it in 34
insects. So, when Gallo and Montagnier could not find 35
it in AIDS patients, others were finding it in non-AIDS 36
patients. Today, we gave you that paper where you were 37
kind enough to read the abstract where they have found 38

it in 100% of women with breast cancer - well, the same 1
people have published another two papers and they report 2
on their finding of not only the env gene but the gag 3
gene, as well, in prostate, in cervical cancer, in ovary 4
cancer and, in fact, they also said that the cervical 5
cancer, human papillomavirus, is only a factor in 6
cervical cancer. They say that this virus, which is 95% 7
of all of the people with HIV, is the cause of cervical 8
cancer and they should develop vaccines to prevent 9
cervical cancer, using these viruses, not the human 10
papillomavirus vaccines. It is not unique at all. The 11
only reason maybe we're not finding more is because 12
people are not trying to find it. You cannot use the 13
molecular techniques. The only way to use the molecular 14
techniques is to have - no matter where they are - is to 15
have proof that the virus, the RNA, the probes you are 16
using came from a virus and they didn't, so we cannot 17
say all these molecular techniques have anything to do 18
with special retrovirus HIV. 19

XXN 20

Q. I just want to make this much clear. As I understand 21
your evidence, are you saying that molecular techniques 22
have no role in viral detection. 23

A. I did not say in other viruses, I am saying in HIV. 24
We're interested here in HIV. 25

Q. Let's talk about viruses, generally - 26

A. Yes, yes, detection, yes. Once you have the viral DNA 27
or RNA, yes, then you can use it for viral detection but 28
before this you have to purify the virus to obtain the 29
probes. You cannot use it unless you do this. You have 30
to have proof. You cannot use DNA just from anywhere 31
and then you say no, you can't. For detection, once you 32
prove that they originated from a virus, then you can 33
use them to detect the same virus, but you have to show 34
that your method is specific. It does not amplify other 35
DNAs or other RNAs. 36

Q. I suggest that your evidence that you have just given 37
about the limitations of molecular techniques flies in 38

the face of the routine practice of viral identification 1
around the world at the moment. 2

A. I am saying they are doing it all the time but, 3
unfortunately, they are not using the right probes. You 4
have to have the HIV - I mean, it is so basic, it is so 5
obvious and it is so obvious and it hasn't been done, 6
so, yes, you can do that. The question is: what are you 7
detecting? 8

Q. It is so obvious and so basic but all those experts 9
around the world haven't worked that out, but you have. 10

A. Yes, they talked - it is not because we are smarter or 11
we are better, we have studied. We did not take 12
Montagnier's and Gallo's claim as proof. The physicians 13
out there are so busy, they cannot do these kinds of 14
things. We are working day and night. Nobody will 15
sacrifice the time which we have put in, not now, we 16
don't need to do it now because we cannot say anything 17
more than we have said, but we have worked very hard. 18
We are obsessed about finding the truth and we did not 19
take what Montagnier and Gallo said and we have been 20
proven right. We have been saying that you have no 21
evidence for purification. Montagnier admitted in 1997, 22
in fact, he did not have nothing. He purified - he had 23
a bunch of cellular fragments. 24

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E. PAPADOPULOS-ELEOPULOS XXN

He said - Gallo - most probably did not have it. In 1
1997 two research groups from - one: laboratory study 2
from France and Germany and another one from America and 3
they are HIV experts, they are people who are trying to 4
make vaccines for HIV. They have admitted that until 5
1997 there was no proof for HIV purification and in fact 6
in the journal study they say also material from these 7
what is called purified virus is used - the proteins are 8
used for - in the antibody tests, and they, the RNA 9
probes, are proof of antibody tests. The proteins from 10
this material which is purified is used for the antibody 11
tests, used the word immunogens I think and the RNA 12
probes no evidence that they come from a purified 13
material. So, they try to purify to obtain purified HIV 14
and prove the existence of HIV proteins in and the 15
existence of HIV RNA. They did not manage. They did 16
not manage. In fact, as I said in my presentation, the 17
French called it, they labelled their picture which was 18
meant to prove purified HIV as purified microvesicles. 19
So, the proteins and the RNA come from purified 20
microvesicles. This is not - since then nobody has 21
published any. The first and last papers which 22
electromicrographs of purified HIV. 23

HIS HONOUR 24

Q. In inverted commas. 25

A. In inverted commas. So you cannot do this test. It is 26

basic. It is basic, we cannot - we can't go beyond 27
this. If I said the problem - this problem is very 28
simple. It is very simple. We have been spending so 29
much time when the scientific problem at least - I don't 30
know the legal problem - the scientific problem is very 31
simple. If you give us evidence for HIV purification, 32
one paper, which evidence for HIV purification and a few 33
confirmatory studies with HIV purification and thus 34
identification of the HIV proteins, the RNA, we will 35
accept the existence of HIV and we stop, the whole thing 36
can stop. On the other hand, if you cannot bring any 37
proof for HIV purification then, I am sorry, no 38

scientist, no scientist can say that HIV - there are HIV	1
proteins, the HIV proteins have been identified, that	2
HIV has been - HIV RNA has been identified and thus HIV.	3
No scientist can claim that. We cannot have - you can	4
have antibody tests but, whatever they mean, do not mean	5
HIV and you can have molecular studies as long as you	6
want, but you cannot claim that the evidence proves	7
infection of HIV or transmission of HIV or whatever you	8
want of viral load. That is in number of molecules of	9
HIV, the number of HIV particles in the blood, you just	10
cannot do it. So, there are two - there is one problem	11
and there are two solutions. We have HIV purification	12
and thus HIV proteins, HIV RNA, and then we can do all	13
the tests under the sun, antibody and molecular,	14
whatever you want, nucleic acid studies, or you don't	15
have purification and then you don't have HIV proteins,	16
we don't have HIV RNA, we don't have HIV and I can have	17
the studies but they are not going to - you cannot	18
interpret them as relating in any way with the virus.	19
XXN	20
Q. Have you finished.	21
A. Yes.	22
Q. Do you agree that viruses are just a piece of genetic	23
material.	24
A. Sorry?	25
Q. Do you agree that viruses are just a piece of genetic	26

material.	27
A. No. Viruses are not a piece of genetic material. Virus	28
is a piece of genetic material. Then all our - we can	29
say that everything which is just a small piece of RNA	30
or DNA is a virus; it can't be. Viruses are particle by	31
definition and they are made of proteins, the main	32
components are proteins and genetic material. Genetic	33
material is not virus.	34
Q. Do you agree that a virus needs to take over a cell to	35
survive.	36
A. Of course.	37
Q. Thank you. Do you agree that to grow a virus you have	38

to grow it in a cell culture.	1
A. Definitely. We say that all the time you can't grow it,	2
viruses have not got the metabolic machinery to	3
multiply.	4
Q. How is it possible ever to get a pure virus in the way	5
you have defined it where you always have to grow the	6
virus in a cell culture.	7
A. It is in your document how you can do it. It is there	8
said here. Shall I read it?	9
Q. You are holding yourself up as the expert. You tell us	10
in your words.	11
A. I am going to read it from here. Sorry. It is your	12
document.	13
HIS HONOUR: The witness is referring to P4.	14
MS MCDONALD: Thank you.	15
A. Chemical -	16
HIS HONOUR	17
Q. What page.	18
A. Nine?	19
Q. Chemical composition of viruses.	20
A. Yes.	21
Q. I have got that.	22
A. 'Chemical composition of viruses. Methods of	23
purification: an essential prerequisite for the chemical	24
analysis of viruses has been the development of adequate	25
measures of purification. Special problems are created	26

by the close association of viruses with the cells they 27
parasitize; it is not an easy matter to free virions of 28
associated cell debris, or even from viral proteins 29
synthesized in excess in the infected cell. 30
Furthermore, the infectivity of virions is very 31
sensitive to inactivation by heat, acid, alkali, and 32
sometimes lipid solvents or osmotic shock. Accordingly, 33
throughout all purification protocols the virus is 34
maintained at near neutral pH and 4 degree C.' 35
Subtitle, 'Liberation of virus from cells'. 'The first 36
step in the purification process consists of obtaining 37
virions free from the cells in which they were grown. 38

In the case of retrovirus we don't have to do this 1
because retrovirus, once they are sampled they come out 2
from the cell. But, other viruses they grow inside the 3
cell, they don't kill the cell, so then you have to use 4
some chemical measures to destruct the cell and obtain 5
the virus. Once you have the viruses, then the virus 6
particles - then what do you do, you have to use a 7
method to separate them, to purify them. Methods of 8
purification, this is the first part, so it says 'After 9
partial purification and concentration by chemical 10
methods, or even without any preliminary treatment, 11
virus particles can be separated from soluble 12
contaminants by centrifugation. Differential 13
centrifugation consists of alternate cycles of low and 14
high speed centrifugation to deposit first large 15
contaminating particles, then virions. Rate zonal 16
centrifugation through a preformed gradient of a dense 17
solute such as sucrose forces virions to sediment 18
through the gradient at a rate determined by their 19
sedimentation coefficient (a function principally of 20
their size and shape). Equilibrium (isopycnic) gradient 21
centrifugation in dense solutes such as cesium chloride 22
or potassium tartrate (or sucrose in the case of 23
enveloped viruses of low density) on the one hand, 24
separates virions from contaminants according to their 25
buoyant density. After prolonged ultracentrifugation at 26

very high gravitational forces the virions will come to 27
rest in a sharp band in that part of the tube where the 28
solution has the same density as the virions, usually 29
within the range 1.15 to 1.4'. This is how you 30
separate. So it is absolutely to separate to define the 31
viral composition, that is the viral proteins and the 32
viral RNA, you have to purify the virus and the method 33
of purification for envelope, which is the case with 34
retroviruses, is by banding in density gradients. 35
CONTINUED 36
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E. PAPADOPULOS-ELEOPULOS XXN

Retroviruses band at the density of 1.16 grams per mil, 1
and they call it 1.16 grams per mill band, they call it 2
1.6 band, that's purified virus, but it did not have any 3
pictures, and you need them, because at that density, 4
unfortunately, it is not only retroviruses which band, 5
their cellular fragments, other viruses will also band 6
there. So you got to have a picture. And you know from 7
the Soviets, from the studies from France and from the 8
USA that the cell fragments band also there. Once you 9
have that, once you have that, and here it is, when it 10
says - 11

HIS HONOUR 12

Q. What page are you reading from now. 13

A. 11, p.11 'Once you purify the virus, then you extract, 14
carefully extract from the virus particle by the 15
treatment with the detergent or phenol -' so once you 16
have purified the virus, and then 'When carefully 17
extracted from the virus particle by treatment with 18
detergents or phenol, the nucleic acid of viruses of 19
certain families of both DNA and RNA viruses is 20
infectious, ie when introduced into a cell it can 21
initiate the production of complete virions'. So that 22
is you can clone the virus. No study, no paternity 23
suit study can be done, including cloning, unless you 24
obtain the nucleic acid from the virus particles, from 25
the purified virus particles. 26

Q.	During the course of giving that answer and reading out	27
	those lengthy passages, you inserted the words 'That's	28
	why you have to have a picture'. Where in that article	29
	do you see those words.	30
A.	That's why you have to have a picture.	31
Q.	Where in that article -	32
A.	I said when they say 'band 1.16 gram per mil', we know	33
	that they band at 1.16 grams per mill, but there are	34
	many other things which band at the same band. So how	35
	you going to know - especially you have some cell	36
	culture - how you going to know that you have virus	37
	particles there, any, or you don't have any, or that	38

they're pure or that they are impure? You cannot.	1
That's what Montagnier said, that's what Gallo. And	2
this is not our criticism, that is criticism of top	3
researcher, Hans Geldblom from Germany and a top	4
researcher from America who said 'We are doing all this	5
work and we don't know, we don't know, where this	6
protein and where this RNA came from'. You got to have	7
a picture. That's what Klatzmann stressed in 1973.	8
They don't have to say it here.	9
Q. That criteria that you just read out, I suggest that all	10
of those things that you said need to occur have in fact	11
occurred with HIV.	12
A. No, I'm sorry. All this acts did not occur. Or they	13
had, they claim that they did, they did bandy. No-one	14
would disagree. They did bandy, and call the 1.16 gram	15
band pure, but they didn't have evidence that it is	16
pure. And Barre-Sinoussi said herself ten years ago	17
'You have got to have evidence'. How can you say	18
Montagnier - forget that you said you had all these	19
things. Montagnier said that in their band they did not	20
have retrovirus particle, and they said the same thing	21
for Gallo. We know from 1997 publication that they	22
could not. They could not have it purified. So no	23
matter how you want to interpret the whole thing, these	24
RNA in proteins came from the material which did not	25
have even virus-like particles, much less the patient	26

virus. So how can you use these RNA and how can you	27
claim that this RNA is HIV RNA?	28
Q. Just while the evidence is fresh in our memories, you	29
just told this court in one of those lengthy answers	30
that you and your group have been proven right in	31
relation to your views on HIV. That's not correct,	32
though, is it. Your views have been completely rejected	33
by the mainstream scientific community throughout the	34
world.	35
A. I said we've been proven correct when we said - we claim	36
that Montagnier and Gallo did not have any evidence for	37
purification and we've been proven by Montagnier himself	38

in 1997 when he said that he did not have purified	1
virus, 'I repeat: we did not purify'. These are his	2
words 'I repeat: we did not purify'.	3
Q. And those words were spoken a long time ago, weren't	4
they, and since then, your views and those of the Perth	5
group have been rejected by all of the mainstream	6
scientific community around the world.	7
A. Our views can be rejected by all the HIV experts, not	8
only since then, they've been rejected from the very	9
moment. They take only what they want from us. For	10
example, Montagnier now not only says, not only is a	11
protagonist of the oxidative theory of AIDS, but	12
apparently he is claiming now that it is his theory,	13
that the oxidative theory is his. How far we can go	14
when he had all my papers, I sent it to him. The first	15
time he ever mentioned in any scientific publication was	16
in 1997 after my paper was there for so long and he had	17
it. And now he claims that it's his.	18
Q. So he has plagiarised your work, has he.	19
A. I'm not saying he's plagiarised. I'm saying that's what	20
he says. We have published - as you know, we have	21
published a paper, a letter you call it, in Medical	22
Hypothesis where we ask Montagnier to come open and say	23
is it HIV or is it oxidation which is the cause of AIDS?	24
Montagnier did not respond, even today, and he has the	25
paper. How it is respond to scientific papers?	26

Q. I will just finish off by just checking this with you so 27
we can get off to a smooth start tomorrow. Firstly, are 28
you aware of a person with a surname of Schuklenk. 29
A. I know the Schuklenk very well. 30
Q. Have you had a chance to read the paper 'Professional 31
Responsibilities of Biomedical Scientists in Public 32
Discourse'. 33
A. I did not read now, but I read long time ago. 34
Q. You ask you to read that overnight. 35
A. You can ask me questions now, because I know what he 36
talk about. You can ask me now. 37
MS McDONALD: I tender a copy of that now. 38

XXN	1
Q. Just so your Honour knows, Mr Schuklenk's used to have	2
similar views to yourself.	3
A. Mr Schuklenk used to visit us all the time.	4
Q. Changed his mind about that, didn't he.	5
A. Yes, he became a professor in South Africa.	6
EXHIBIT #P46 PAPER TITLED 'PROFESSIONAL RESPONSIBILITIES OF	7
BIOMEDICAL SCIENTISTS IN PUBLIC DISCOURSE', AUTHOR PROFESSOR	8
U. SCHUKLENK DOWNLOADED ON 28/1, BUT DATED 13/6/2003,	9
TENDERED BY MS MCDONALD. ADMITTED.	10
	11
ADJOURNED 5.01 P.M. TO THURSDAY, 1 FEBRUARY 2007 AT 10 A.M.	12
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E. PAPADOPOULOS-ELEOPULOS XXN

