

people, but it was not the norm. Mr. Lucas stated that he had been involved in meetings with large numbers of people before. Detective Fitzpatrick testified that it did not occur to him that someone might be intimidated to meet with so many authorities at the same time.

There is no evidence that Crown counsel or the investigators acted in any improper way during these meetings. However, numerous, sometimes lengthy, meetings, often involving at least five or six prosecutors and officers, tested the independence and impartiality of the experts. Unfortunately, in some respects, Ms. Nyznyk and Mr. Erickson failed the test.

The relationship between the CFS and the police and prosecutors generally has been raised as a systemic issue at this Inquiry. The overwhelming percentage of work done by the CFS is done at the instance of the authorities. This, and the evidence heard at this Inquiry, compels the creation of measures which enhance the independence and impartiality of the CFS and its employees and protect against bias. These recommended measures are addressed at the conclusion of this chapter.

N. Continuing Involvement of the CFS

(i) Overview

Mr. Crocker was a forensic biologist at the CFS who took part in the latter stages of the second trial and in Mr. Morin's appeal against conviction. He became involved in the trial when he attended in Court, at Mr. Erickson's request, to listen to the testimony given by the experts for the defence. He became involved in the appeal when he was asked to assist the Crown with respect to the application by the defence to introduce fresh evidence. Appeals are normally decided on the basis of the evidence presented at trial. However, in certain exceptional circumstances, reflected in the case law, a party to an appeal may be granted the right to introduce new ('fresh') evidence for consideration by the Court of Appeal.

The defence in Mr. Morin's case sought to have Mr. Cook's evidence admitted as fresh evidence. Mr. Cook swore an affidavit reflecting his views as to the misuse of his study and the insignificance of the fibre findings. The Crown exercised its right to cross-examine him on the affidavit. Mr. Crocker was asked to assist in the cross-examination conducted by the prosecution and

was provided with the affidavit as background information.

As reflected earlier, both Mr. Crocker and Mr. Cook believed that the fibre findings in Mr. Morin's case did not assist in proving that Christine Jessop had been in the Honda, and that the Jackson and Cook study had no application to the case. Mr. Lucas testified that if someone at the CFS learns about a problem with the evidence given by one of their fellow experts they should take corrective steps and inform the prosecution. The evidence at the Inquiry addressed this issue in the context of Mr. Crocker's involvement.

(ii) The Trial

Mr. Crocker attended in Court for the testimony of the defence experts, partly in order to assist the prosecution in conducting its cross-examinations. He did not familiarize himself with the issues in the case in advance, and he had not been told what Ms. Nyznyk and Mr. Erickson had said in their testimony. He did know what the various fibre findings were in the case and that his colleagues believed the various fibres were similar.

Two experts testified for the defence: John A. Reffner and George W. Neighbor. Both asserted that the fibre findings were of no significance to the case. Mr. Neighbor added that the findings might have been the product of random occurrence. He also stated that the existence of a shared environment between the Jessops and the Morins negated the significance of any fibre findings. Mr. Crocker testified before the Commission that he essentially agreed with all of this evidence. But he could not recall if he advised the prosecutors of his agreement with the defence experts, and he acknowledged that he may not have.

Mr. Crocker explained that when the defence experts testified, he had concentrated more on the aspect of their evidence which disputed the existence of similarities between the fibres, as found by Ms. Nyznyk and Mr. Erickson. Mr. Crocker did not believe that his colleagues were wrong about the similarities. He acknowledged that he probably should have advised Crown counsel that, irrespective of the existence of the similarities, the findings had no significance. He was asked about his reaction to the cross-examination of Mr. Neighbor, in which Mr. Smith tried to enhance the significance of the fibre findings:

Q. What do you see, sir, as your obligations, if any, at

that point in time, when you now are sitting in the courtroom, you know enough about the case to know whether a Crown is trying to stretch something or not, you hear a series of questions where you, as a colleague of the two people whose opinions are being stretched, are sitting there listening. Is your obligation to wait for the next recess to say to the Crown: Hold it, you're doing something you shouldn't be doing, and I, as a scientist, insist you correct it?

A. Perhaps I should have. I'm not aware, I can't recall what conversations we had with respect to the evidence, but my opinion has always been, it was relatively thin.

Q. Don't you think that you should have done that, Mr. Crocker?

A. Quite possibly, yes.

Q. Yes. Did you do that?

A. No, I did not, not that I'm aware of, in any case. I can't recall, as I indicated.

Q. Did you at least tell the Crowns, without necessarily insisting they do something about it, did you at least tell the Crowns that they were stretching it? They were trying to take something a lot further than they should be? That they were trying to stretch something in a first degree murder trial?

A. As I said, I have really problems remembering what our interplay was.

Mr. Crocker did not inform Mr. Pinkofsky of his views on the evidence. He accepted that the defence would have loved to have known of them. He denied that he had taken the side of the prosecution.

(iii) The Appeal

Ms. MacLean was assigned the task of conducting the cross-examination of Mr. Cook for the fresh evidence application. Mr. Crocker met with her and one of the Crown's appellate counsel in advance of the cross-examination. Mr. Cook's affidavit and opinions would have been discussed.

Mr. Crocker read the affidavit at or before the meeting. He believed that he told both Crown attorneys that the study did not apply to the *Morin* case, but that it might be useful for educating the jury in one aspect of fibre evidence.

Mr. Crocker again met with Ms. MacLean and appellate counsel at the time of Mr. Cook's cross-examination. He listened to Mr. Cook's evidence. He agreed with Mr. Cook that the fibre findings did not advance the prosecution's case, and that the Jackson and Cook study did not apply.

Mr. Crocker could not specifically recall discussing the study with Ms. MacLean during or after Mr. Cook's cross-examination. He agreed it was logical that he would have, since he was present in order to assist Ms. MacLean, but he asserted that his recollection was flawed. He also pointed out that he had been unsure at the time whether Mr. Erickson and Ms. Nyznyk had misused the study. He had not read the evidence they gave at the second trial, and this limited his ability to respond to Mr. Cook's allegation that the study had been misused.²²

Mr. Crocker initially testified that he told the prosecutors that he agreed for the most part with Mr. Cook's evidence. He later conceded that it was possible he did not:

Q. Now, similarly, sir, if Susan MacLean has no recollection of you saying either during or after the cross-examination, that you agreed with Mr. Cook, either generally or specifically. Is it possible that you didn't express that view to her?

A. Yes, that's quite possible. As I said, I can't recall what happened exactly after the cross-examination, but I don't think I had very much contact with the Crowns at that point.

Mr. Crocker did not recall telling the Crown attorneys that the fibre findings did not help prove that Christine Jessop had been in the *Morin* Honda. He was not certain if he told them the fibre findings did not advance the Crown's case. Mr. Crocker explained that he had been primarily concerned about the use of the study. He also pointed out that he did not

²² Mr. Erickson had also told him that he had not misstated the study or connected it with the *Morin* case.

understand all the factors which were at play in the case:

A. Well, the problem I have in my own mind is in knowing where these fibres, how they were brought about, what had been said about them, all of the environmental factors that Mr. Cook had brought up. There were certain things in his cross-examination that were brought to his attention with regard to the police handling, their attendance at various scenes, so at that point, I wasn't sure how all these factors interrelated, because I wasn't aware of all the factors of the case itself. I was merely there to listen to what Mr. Cook had to say, and on that basis, I could generally agree with him, yes.

Mr. Crocker ultimately acknowledged that he had no independent recollection of exactly what he said to Ms. MacLean and appellate counsel. He also conceded that he may not have expressed his views clearly and forcefully:

A. I'm just saying that my recollection, had I said something, may not have been as understandable as it may have been. I do believe I brought forward the fact that the study did not apply as an overview of the case, but I may not have been forceful enough in bringing that to their attention, since they made no notation of that fact.

Mr. Crocker knew from the Crown's jury address (much of which was read out during Mr. Cook's cross-examination) that much significance had been attributed to the fibre findings at trial. He accepted that he probably should have forcefully intervened and advised the prosecutors that Mr. Cook was correct. He also accepted that he should have put his views down in writing.

Ms. MacLean testified that when she met with Mr. Crocker in advance of the cross-examination, he did not say that he agreed with Mr. Cook's affidavit or that there was no correlation between the study and the case. Ms. MacLean's notes of the meeting do not reflect any such information. Ms. MacLean further testified that when Mr. Crocker attended for the cross-examination, he never said that the Crown had misused the study or that he agreed with Mr. Cook's evidence. He simply stated that he disagreed with Mr. Cook that the examinations should never have been conducted at all. Mr.

Crocker agreed that that issue was probably discussed.

Ms. MacLean conceded that she never asked Mr. Crocker for his views on Mr. Cook's fresh evidence. She was asked why she did not:

Q. Do you find it remarkable, put it this way, that having heard and read, having read and heard in that order, I suppose, the evidence of Mr. Cook with the reputation that you understood he came with, in an area that had been used at trial and in particular, his writings had been used. Do you find it remarkable that in those circumstances you didn't ask the expert that you were consulting, well, what do you think of what he has to say?

A. Well, I just don't remember discussing it at all, it just wasn't — didn't seem to be an issue that I was addressing. It was basically, what does he mean? Not, what do you think, but what does he mean? And what his reputation is, is he likely to be fair, or just — I guess the word "hired gun" was used, whether he was or wasn't, which he wasn't.

Q. And were you so into process that you weren't really worried about the validity of what he was saying, but just the process? Is that why you didn't ask Mr. Crocker well is what he saying valid, or not?

A. No. Because — no, no, no. Mr. Crocker — what I'm saying is, we already had the evidence of Mr. Erickson and Ms. Nyznyk on what the study meant at the trial. And my understanding was that was the evidence the Crown would be relying upon, subject to this fresh evidence issue. The role that Mr. Crocker was playing wasn't to give me another opinion about this whole issue, he wasn't being consulted, well, what evidence would you have given if you were asked the same questions.

That's wasn't the purpose at all. It was simply, I don't understand what Mr. Cook's saying here, what is he saying, or what is the meaning? And if something technical comes up, can you assist me?

Q. So this chap comes all the way in from England to undermine the evidence of Nyznyk and Erickson, and

you never think to ask Crocker whether what he's saying as a whole, does that or not?

A. No. I didn't raise that issue with him. You're right, I probably should have, but it didn't come up. It wasn't that — wasn't sort of his function in this.

Mr. Crocker agreed that he attended the cross-examination to act as a resource in case something new arose in a technical area. The CFS also had an interest, since Mr. Cook was taking issue with its work.

(iv) Findings

Having regard to the totality of the evidence, I cannot be satisfied that Mr. Crocker communicated his views to Ms. MacLean or to appellate counsel. If he did not, he should have. A scientist, whose role it is to assist the prosecutor either at trial or on appeal, must appreciate that this role involves not only assisting the prosecution in structuring a response to the defence evidence (which is not inappropriate), but advising the prosecutor when the defence evidence has merit. Further, this role may involve advising the prosecutor that the prior testimony offered by the Crown's own witnesses (even if they came from the CFS) was flawed. Independence and objectivity require no less. Further, such a role may not necessitate a full review of all the forensic issues in the case. However, it may involve (and it did here) a need to more fully familiarize oneself with the issues in the case.

Ms. MacLean was chosen to cross-examine Mr. Cook on the fresh evidence application, given her familiarity with the hair and fibre evidence. Her preparatory notes reflected "DON'T UNDO GOOD STUFF FROM TRIAL." It is now clear to Ms. MacLean from having read a summary of Mr. Cook's evidence before the Inquiry that the Jackson and Cook study should never have been introduced into evidence at all or should have been suitably qualified by distinguishing it from the facts of the *Morin* case. However, Mr. Cook said virtually the exact same thing during his testimony on the fresh evidence application. It is likely that her view of Mr. Cook's evidence was coloured by her involvement in the prosecution of Guy Paul Morin. This may have prevented her from seeing just how flawed the Crown's approach to the study had been at the second trial. If Mr. Crocker failed to communicate his views to Ms. MacLean, this may have contributed to Ms. MacLean's inability to accurately and objectively assess Mr. Cook's evidence.

The obligation of Crown appellate counsel confronted with fresh evidence which reflects adversely upon the prosecution's case at trial is a related issue, which is addressed later in this Report.

O. Contamination

(i) Introduction

The evidence at this Inquiry revealed that fibres relating to the Morin case had been contaminated while they were in the possession of the Centre of Forensic Sciences. As a result of these revelations, the Centre retained an independent forensic analyst, Thomas Hopen, of MVA Inc., to examine and report on the contamination. On September 30, 1997, Mr. Hopen's Report was filed with the Commission. It read, in part:

Based on the examinations and analyses conducted, over fourteen (14) purplish-pink animal hairs identified as 'contamination fibres' were indistinguishable from purplish-pink animal hairs identified as 'case fibres', and in the opinion of the undersigned, could have originated from the same source.

That same day, Dr. James Young, the Assistant Deputy Solicitor General, Public Safety Division, issued a press release. It stated, in part: "The review also confirms that the fibre evidence in the Morin case was contaminated from the outset."

Dr. Young's concession is not made by some of the CFS witnesses who testified at this Inquiry. Though the contamination within the Centre is conceded, they question whether it affected the fibre findings in the Morin case. This issue is addressed below.

(ii) Discovery of the Contamination

Shirley Stefak, a CFS technician, was the first person to discover the contamination. Just before the first trial, the prosecutor(s) asked Ms. Nyznyk if she could find more comparisons for use at trial. Ms. Nyznyk asked Ms. Stefak to re-examine the tapings from Christine Jessop and the Honda, as well

as the slides previously mounted. She asked Ms. Stefak to look for red polyester or animal hair fibres in particular, since those were types respecting which she had already found positive comparisons. Ms. Nyznyk wanted someone to look at the tapings with a ‘fresh eye.’

When Ms. Stefak re-examined the tapings, she very quickly observed obvious contamination, visible to the naked eye, on both the Jessop and the Honda tapes.²³ Ms. Stefak mounted one or two of the contaminants from each set of tapings and microscopically verified that they were red animal hair fibres. Though Ms. Stefak could not recall exactly when she first discovered the contamination, we know the request came from Ms. Nyznyk just prior to the first trial, which commenced on January 7, 1986. It is clear that her discovery of the contamination took place in late 1985 or early 1986, and certainly before Ms. Nyznyk began testifying on January 22, 1986. This timing later becomes important.

(iii) Reporting the Contamination to Nyznyk and Erickson

Ms. Stefak was troubled by the contamination. It was a “pretty frightening thing to find. It’s what we try to avoid at all costs in trace evidence.” She immediately reported her discovery to Ms. Nyznyk. She returned the tapings and pointed out the areas of contamination. Ms. Nyznyk examined the tapings and confirmed that they had indeed been contaminated. Ms. Nyznyk advised Ms. Stefak that she did not believe that the contamination had affected her findings, because she would have noticed it, had it been present during her own examination. Ms. Stefak accepted this, believing that any trained person would have noticed the contamination. Ms. Stefak regarded it to be Ms. Nyznyk’s responsibility to report the contamination to Mr. Erickson, their section head. She also assumed that Ms. Nyznyk would want to further investigate the extent of contamination which was present.

I pause here to note the obvious. Even if the contamination had not affected Ms. Nyznyk’s findings (a point later addressed), it was nonetheless

²³ Ms. Stefak observed what looked like red animal hair fibres on the exterior of the tapes, adhering to the sticky areas of the tapes that had curled up, and on wedges of the tapes that had been previously cut in order to remove fibres. She believed she also saw one red animal hair fibre adhering to the acetate sheet in which the tapings were stored.

deserving of urgent attention: What if the defence wished to conduct further examinations of the tapings? What if the tapings were presented as original evidence for the jury? How had the contamination occurred within the Centre and could other original evidence in other cases be contaminated? What quality controls were in place to prevent future contamination? What about the prosecution's request that the tapings be further examined for additional fibre comparisons?

Mr. Cook testified that he would have followed up any discovery of contamination with an investigation into how it could have occurred and whether any other cases had been affected. He would have wanted to know whether the contaminants matched the incriminatory fibres. He would be very concerned if evidence of contamination was ignored.

Ms. Nyznyk testified that she told Mr. Erickson about the contamination. She also assured him that the contamination had not affected her original examination. Ms. Stefak testified that Mr. Erickson spoke to her about the contamination a few days after she told Ms. Nyznyk about it. Ms. Stefak told him everything she had discovered, and Mr. Erickson said that he would take care of it. Ms. Stefak, Brenda Scheffel (another technician) and Ms. Nyznyk also testified that after the contamination was first discovered, it became the topic of local gossip at the CFS. Ms. Scheffel thought that everyone in the fibre unit heard about it.

At this Inquiry, Ms. Nyznyk did not initially reveal that there had been any in-house contamination at the CFS. Similarly, Mr. Erickson did not initially reveal that there had been in-house contamination or that he had learned of it by 1986. The sequence of the testimony before me is of importance.

Ms. Nyznyk was the first witness to testify in Phase II of this Inquiry — the forensic evidence phase. Her testimony was heard on April 7, 8, 9, 10 and 14, 1997. The Commission had no evidence in its possession at that time concerning contamination at the CFS. Nevertheless, counsel for the Jessops, Mr. Reich, explored the issue with Ms. Nyznyk in systemic terms:

Q. Is there any chance ... that a person handling a garment, or perhaps a police officer who enters a room and is near a garment, could pick up a fibre, walk to the next room, where, for example, the suspect's

garments would be, and accidentally deposit one of the microscopic fibres on the other garment?

A. It's possible.

Q. Did that concern you at the time?

A. No.

When Ms. Nyznyk was recalled some time later to testify about the in-house contamination (once it had been exposed), she explained that she forgot about the issue when responding to Mr. Reich's questions. She was confident that her initial examination had not been affected by contamination.

After Ms. Nyznyk testified for the first time, the Commission obtained further documentation from the CFS. One of the documents was a report by Ms. Stefak (as requested by Mr. Erickson), dated February 5, 1991, and entitled "Summary of Textile Examinations." It showed that she had examined the Morin-related tapings at Mr. Erickson's request *between the first and second trials*, noting the extensive contamination of those tapes. The Summary also contained this entry:

[T]hese fibres also appear to be contamination fibres on the tapes; other, generally similar, red animal hairs have been removed (and considered as possible contamination) at an earlier date (1985-1986).

Of course, Ms. Stefak's report not only revealed the contamination of the tapes (previously unknown to the Commission), but raised the additional possibility that the contamination had been discovered as early as 1985-1986.

Mr. Erickson first testified before the Commission on April 14, 15 and 16, 1997. He was asked whether there was any contamination issue in respect of the *Morin* tapings. He responded that he was asked by the prosecution to re-examine the tapings between the first and second trials. When the tapings were returned to the CFS, he discovered the contamination himself. He later directed Ms. Stefak to re-examine the tapings. Why he would do this in the face of this contamination is a matter which I later address. In 1991, Ms. Stefak informed him of her findings. He did not disclose her report to the prosecution or to the defence. He simply explained to the prosecutors that the tapes could no longer be examined because they had been handled by a

number of people. (The serious difficulty with this explanation is addressed below.)

Mr. Erickson denied that Ms. Stefak's report, an excerpt of which is set out above, suggested that the contamination had been previously discovered in 1985/1986. According to him, Ms. Stefak's comment only meant that the red animal hairs had been removed in 1985/1986, not that contamination had then been identified.

Mr. Erickson's evidence was not completed on April 16, 1997. To accommodate his schedule, his testimony was set to resume on April 29th.

In the interim, Mr. Levy, counsel for Messrs. McGuigan and Smith, received an anonymous letter which read:²⁴

Dear Mr. Levy:

With respect to the Guy Paul Morin inquiry there are some things you should know.

Although Stephanie Nyznyk was in charge of the fibre examinations for this case she delegated much of the initial search of the articles for fibres to a contract employee named Lynn Sedgewick who had come from an anthropology or archaeology program at Queens or University of Toronto around that time (circa 1985).

Shirley Stefak has said she observed Lynn Sedgewick handling the items in the Morin case while wearing a red sweater but no lab coat. Shirley also said that she informed Norman Erickson of her strong concerns about this at the time.

As you can see, it was not only a matter of the weight to be placed on this evidence. The fibre evidence was suspect from the very beginning. You must speak with Lynn Sedgewick to get to the bottom of this.

I hope Shirley fully discloses these facts herself but if she does not I will consider coming forward but my

²⁴ I can place no reliance upon an anonymous letter for its truth. It is noted here because it contributes to the narrative and explains the investigation which followed.

testimony would only be hearsay.

Also in the interim, Ms. Stefak spoke to Dr. Ray Prime, the present Director of the CFS. She expressed the concern from reading the newspaper accounts of the Inquiry that the information about the contamination did not appear to be coming out. On April 29, 1997, Mr. Sandler, Commission counsel, interviewed her about the matters now raised on the evidence. He then re-examined Mr. Erickson, referring to Ms. Stefak's report:

Q. What did you take, when you read these notes, when she said: "Considered as possible contamination" and she says: "At an earlier date, 1985 to 1986" ... What was in your mind, when you see that note?

A. Well, the only thing I can think of, after the tapes have been originally examined, the appropriate fibres taken off, then there's been some possible form of contamination.

Q. But we're talking about 1985 to 1986, so what did you take from that?

A. That that contamination could have occurred in 1985 or 1986 ... The original fibres were taken off in April of 1985 ... So we've got from April of 1985 till 1986 that they potentially could have become contaminated.

Q. We know that the first trial took place in 1986, am I right?

A. Yes.

Q. And it would appear that these notes would suggest that contamination may have occurred back prior to, or during the time frame of the first trial. I mean, isn't that what the notes say?

A. That would indicate that, yes.

Q. Right, so what reaction, if any, did you have when notes from a well-trained technician told you that this contamination may have occurred back prior to, or during the first trial?

A. Well, I felt that, as I said, the initial removal of

those fibres were done in a proper manner, taken off, and then subsequent to that, there may have been some contamination. But I felt that the original work done by Ms. Nyznyk and Ms. Scheffel, related to fibres that they had removed under the tapes, and they weren't a form of contamination.

Q. Well, let's just explore this a little bit, because I'm going to suggest to you that Ms. Stefak was asked by Ms. Nyznyk, back prior to the first trial, to look at these tapings with a view to seeing whether or not there was anything on the tapings that might have been missed by Ms. Nyznyk.

A. Revisited in 1986.

Q. Prior to the first trial, I'm suggesting.

A. Yes.

Q. All right. Did you know that back then?

A. Yes.

Q. You did? All right. I'm going to suggest to you that Ms. Stefak examined the very same tapings that she's now reporting on in 1991, back in late 1985 or early 1986, before the first trial. Isn't that so?

A. I believe she examined them in 1986.

Q. You do? And I'm going to suggest to you that back then, she reported to Ms. Nyznyk that these tapings were contaminated, and accordingly could yield no meaningful further results.

.....

A. I don't recall that.

Q. Well, is that possible?

A. It's possible, yes.

Q. I'm going to suggest to you that — I'll ask you flat out — didn't Ms. Stefak or Ms. Nyznyk advise you back prior to the first trial, that there was this

contamination issue that had arisen in connection with the tapings, back prior to the first trial? I'm not interested in 1991/1992.

A. Again, I don't recollect that conversation. I'm not saying she didn't, but I don't recollect that conversation.

Q. You don't. So, is it possible that back prior to the first trial, people at the Centre of Forensic Science brought to your attention, that however — and again, I'm not interested right not in whether the contamination occurred during the tapings, after the tapings, whatever, but is it possible that somebody brought to your attention, prior to the first trial, that these tapings were contaminated, and therefore could yield no further meaningful examination results?

A. That's possible.

.....

Q. [Y]ou recall that there was a concern, back in 1986 about how this contamination had occurred within the centre?

A. Yes, that could be.

On all the evidence, there is no doubt that the contamination was discovered by early 1986 and that Mr. Erickson was told about it at the time.

(iv) Investigative Responses to Known Contamination

Ms. Nyznyk told me that she found the contamination “disturbing” and it became clear to her, whenever the contamination had taken place, that it had occurred in some way *within the Centre*. Nonetheless, it never occurred to her to investigate the cause or to check other files to see if it had spread elsewhere. She could offer no explanation why she failed to do so.

Ms. Nyznyk was asked whether she ever compared the slides of the contaminants (prepared by Ms. Stefak) to the slides respecting her original findings. She did not recall doing so, and had no notes of doing so. At one point, she stated that it would have been logical to do so and, indeed, she

assumes that she did. She then agreed that the only reason she would do so was out of a concern that the contamination had affected her original findings — a concern she claims she did not have. This, and many other inconsistencies in her evidence, cannot be reconciled. Some of the problems in the quality of her testimony might be explained by the passage of time and her present ill-health. Unfortunately, however, not all of these problems can be explained away. In the result, it is difficult to accept her unsupported evidence on any contested issue.

Ms. Nyznyk made no notes of the contamination she herself saw. Ms. Stefak offered Ms. Nyznyk her 1985/1986 rough notes and offered to prepare further notes of the contamination. She testified:

When I returned the tapings to Stephanie Nyznyk, I asked her if she would like me to make notes for what I'd seen in terms of the contamination, and she told me no, that she would look after it herself.

This was similar to Mr. Erickson's reaction to Ms. Stefak that he 'would take care of it.'

There is no evidence that Ms. Nyznyk or Mr. Erickson did anything about the contamination when it was reported to them. They told no one outside the CFS. Ms. Nyznyk had no interest in documenting the contamination or retaining any documentary record of the contamination in her file. She agreed that, normally, whatever notes a technician makes, would be placed in the analyst's files. Slides which Ms. Stefak prepared to show the contaminant fibres were not located in Ms. Nyznyk's files. There is no evidence that Mr. Erickson, as the unit's section head, documented the contamination in any way or advised the Director of this serious problem within the Centre.

Mr. Erickson speculated before me as to the causes of the contamination. He raised the possibility that the police had caused the contamination by storing items together in the same box, but later evidence demonstrated that the samples had to be contaminated either entirely or, at least, largely while at the CFS. He acknowledged that the contamination could have occurred at the CFS:

Q. [O]ne thing it could have been is this contamination could have occurred at the time of the

examination at the Centre of Forensic Sciences, by Ms. Nyznyk.

A. That's a possibility, but, as I say, I don't know.

He was cross-examined about his position:

Q. In other words, no real effort seems to have been made to determine what cause there could have been of the contamination. Am I right?

A. That's correct.

Q. No investigation at all. You made assumptions that there was something else in the box, that someone was fiddling around with it. That the hairs fell off it, and that someone opened up these envelopes that these animal hair fibres were in, and managed to scatter them in the envelopes. That seems to be what you're saying.

A. That's a possible explanation. I don't know, Mr. Lockyer.

Ms. Stefak stated that people in the fibre unit speculated about possible causes of the contamination. Someone suggested that it might have been caused by a technician, Lynn Sedgewick, wearing a red sweater during the initial examination of the trace evidence. Ms. Scheffel raised this possibility with Mr. Erickson some time between June 1986 (when Ms. Sedgewick left the CFS) and November 1989 (when Ms. Scheffel departed).

Ms. Scheffel testified that Mr. Erickson responded to her suggestion by stating that he did not know how to get hold of Ms. Sedgewick. She was a little baffled by this response since she was sure that the CFS could find some way to get in touch with Ms. Sedgewick. She could see that the subject was a touchy issue. She also assumed that Mr. Erickson was just having a bad day, and was dealing with it in his own way. But she did lose some confidence in Mr. Erickson as a result of his response.

It turned out that Mr. Erickson did contact Ms. Sedgewick, as well as Ms. Scheffel (who had left the CFS). He telephoned them in 1990 or 1991 to determine whether either ever owned a red angora sweater. Each confirmed that Mr. Erickson had contacted them about their sweaters. Indeed, Mr.

Erickson took a sample of Ms. Scheffel's fuzzy purple sweater. Mr. Erickson was asked about this:

Q. It now seems, sir, that you did conduct an investigation to see where these contaminant, as you call them, fibres?

A. In terms of those two people handling them, but I did no investigation in terms of the fur samples that were in the box.

Q. Why didn't you tell us about this, sir? Why didn't you tell us about calling these two women to see if they had red angora sweaters, when I was directing questions to you that made it very clear I would like to have had that information?

A. Well, I apologize if I didn't tell you that. I thought you were referring to the contamination within the boxes.

Findings

This investigation, if it can be described as such, was too little — too late. I find that from 1986 to 1991, Ms. Nyznyk and Mr. Erickson demonstrated no real interest in determining how or why the contamination occurred. They also deliberately chose not to disclose this contamination to anyone outside the CFS.

(v) Further Examinations in 1986 Despite the Contamination

The first trial commenced on January 7, 1986. While the trial was in progress, and before she testified on January 28th, Ms. Nyznyk continued to work on fibre comparisons. She issued reports on January 13 and 17, 1986. Several new findings of fibre similarities were reported after the contamination had been identified. The question therefore arose whether these fibres had already been mounted on slides before the contamination occurred or whether they were removed from tapings after the contamination was identified.

The evidence on this point is unclear. Ms. Stefak testified that at least three fibres ultimately found to be similar by Ms. Nyznyk were identified on

or after January 6, 1986.²⁵

Ms. Nyznyk testified that no fibres were removed from the tapings after the contamination was known. Ms. Stefak similarly believed that all the fibres she identified were removed before the contamination was discovered. She could not be 100 percent certain of this, but felt that she would not have re-examined contaminated tapings. (Of course, she reluctantly did re-examine contaminated tapings years later at Mr. Erickson's direction.)

Both Ms. Nyznyk and Ms. Stefak were questioned about Ms. Stefak's examination notes dated January 6, 1986. Some of the slides listed in the notes contained fibres ultimately found to be similar by Ms. Nyznyk. Ms. Stefak testified that it did not necessarily follow that the slides were mounted on that day. She said that, normally, tapings would be screened for interesting fibres, which would be mounted, but not identified until a later date. The fibres could, therefore, have been mounted a number of days before, and only identified on January 6, 1986. The fibres could also have been mounted after that date, as tapings were re-examined and the results noted on the bottom of the same page. Ms. Stefak stated that, during that period, the analysts and technicians did not record the date that fibres were mounted, and were not that careful about note taking in general. Ms. Nyznyk agreed that the mounting dates could not be determined from the notes. At the second trial, Ms. Nyznyk twice reflected that she mounted other fibres on April 29, 1985, by referring to notes so dated. It was suggested to her that this demonstrates that the notes do reflect the date of mounting. She replied that April 29th was the date on which she examined the fibres in question. But she was wrong to testify at trial that April 29th was the date when the fibres were mounted because, as she later said, it would have been physically impossible to mount all the fibres listed on the April 29th notes on one day. Ms. Stefak agreed and made the same observation in relation to the January 6th notes.

Ms. Nyznyk was also cross-examined about the fact that Ms. Stefak's notes of January 6, 1986, refer to slides not listed in Ms. Nyznyk's notes of her original examinations in 1985. The new slides, in turn, hold fibres which do not appear to correspond in colour or type to the fibres on the old slides

²⁵ They were one purple/pink animal hair fibre from Christine Jessop's sweatshirt, one purple/pink animal hair fibre from the Honda, and one dark grey animal hair fibre from Christine Jessop's turtleneck.

created by Ms. Nyznyk. It was suggested that this indicates that Ms. Stefak created the new slides from additional fibres removed from the various tapings and not from the old slides. Ms. Nyznyk countered that Ms. Stefak may have simply created new slides from fibres that had been mounted, but not previously noticed on the old slides. This is sometimes done when fibres are found in clumps on slides, and the examiner wants to remount them individually to spread them around. Ms. Nyznyk further testified that she would have expected Ms. Stefak to remove many more fibres than are listed in the January 6th notes if she had examined the tapings anew. Ms. Nyznyk acknowledged, however, that she had directed Ms. Stefak to concentrate her search on red animal hair fibres. Therefore, Ms. Stefak might have been motivated to remove relatively few fibres.

Findings

I cannot be satisfied that additional fibres, cited in Ms. Nyznyk's trial testimony, were extracted from the tapings after the contamination was known to her. The evidence is inconclusive. We do not know precisely when the contamination was discovered. This is due to the failure to document the contamination properly. We also do not know precisely when the relevant fibres were extracted from the tapings and mounted, as opposed to when they were microscopically compared and identified as significant. This is due to the inadequacy of the records kept of work done by the analysts and technicians. Of course, the tapings may have been contaminated well before Ms. Stefak's discovery, in which event all Ms. Nyznyk's findings were tainted anyway. I will return to the evidence bearing upon the potential causes and timing of the contamination later in this Report.

(vi) The Re-Examinations in 1990/1991

I have earlier noted that in 1990/1991, Ms. Stefak re-examined tapings and vacuumings relating to the *Morin* case. This was at Mr. Erickson's direction. Her re-examination yielded further evidence of contamination.²⁶ Her findings were recorded in a "Summary of Textile Examinations," dated February 5, 1991. This re-examination must be reviewed in some detail since

²⁶ The re-examination also produced what were arguably exculpatory results relevant to the case. These results were never disclosed to the defence or, indeed, to anyone else.

it raises additional issues of importance to this Inquiry.

Ms. Stefak found contaminant fibres on the undersides and upper surfaces of the tapings. She concluded that the fibres on the undersides were contaminants because she found similar, obviously contaminant, fibres on the upper surfaces and curled edges of the tapings.

Ms. Stefak found contaminant fibres of a wide range of colours and types. Included amongst them were red wool fibres and red animal hair fibres. Some of these red fibres were located on the undersides of the tapings. Ms. Stefak noted in her summary that no other “colour/type” of fibres occurred in significant amounts on both the tapings associated with Mr. Morin and the tapings associated with Christine Jessop.

Amongst others, Ms. Stefak found the following contaminant fibres:

1. On the tapings of the Honda,²⁷ one pink/red animal hair fibre on the underside and 30 pinky/red animal hair fibres on the outer surface;
2. on the tapings of Christine’s clothing and personal effects, one red animal hair fibre on the outer surface;
3. on the tapings from the Honda, 31 dark red wool fibres;
4. on the tapings from Christine’s clothing and personal effects, six dark red wool fibres on the underside and 13 dark red wool fibres on the outer surface.

Ms. Stefak also found red animal hair contaminant fibres in the vacuumings. Only some of the vacuumings had been opened and examined previously by Ms. Nyznyk. Only the previously opened vacuumings appeared to be contaminated. This raises the obvious concern that the contamination was related, in some way, to the examination process.

²⁷ Ms. Stefak examined five of the 15 tapings. She did not re-examine the taping on which she had found a purple/pink red animal hair in January 1986. This fibre was included in Ms. Nyznyk’s findings.

Ms. Stefak did not microscopically compare any of the contaminants to the fibres found to be similar by Ms. Nyznyk. She could state, however, that they were essentially the same colour and type. Further, Ms. Stefak did a microscopic comparison of 38 of the red wool contaminants found on the tapings from Christine Jessop's clothing and from the Morin Honda. She found that 12 fibres from the clothing were microscopically similar to 19 from the Honda.

The prosecution had asked Mr. Erickson to re-examine the trace evidence in Mr. Morin's case in advance of the second trial. Mr. Erickson testified that after he observed the contamination on the tapings he did not "want to undertake any comparisons" with them. Questions were directed to him as to why, therefore, he had Ms. Stefak re-examine the contaminated fibres. Did he direct the re-examination of the fibre evidence to potentially obtain further evidence to be used in the Morin prosecution?

Mr. Erickson stated that after observing the contamination he advised Mr. Scott that nothing more could be done with the tapings, since they had been handled by a number of people. He did not disclose the existence of the contamination. He explained that he asked Ms. Stefak to conduct the re-examination as a sort of "academic exercise"; he wanted to determine what the contamination was, and demonstrate why it was not advisable to revisit tapings that had been taken out of the laboratory and later returned for re-examination; he thought that it could be a useful lesson about contamination and the value of re-examinations.

Ms. Stefak could not say why Mr. Erickson asked her to re-examine the tapings. She was not even sure that she ever understood why he made the request. She reminded him that the tapings were contaminated (he did not seem to remember), and told him she was uncomfortable with the assignment:

Q. Now when Mr. Erickson asked you to do further work on the fibre tapings, I take it, on the case — right? — did you have any concerns that you expressed to him?

A. I had a lot of concerns because I knew the tapings were already contaminated, and I know that I would indicate to him that there wasn't any point in doing any further work on the tapings because of the contamination.

Q. All right. Did you want to do the further work?

A. No.

Q. Did you tell him that?

A. Yes, I told him I didn't really want to have anything more to do with it.

Mr. Erickson denied that Ms. Stefak ever expressed any discomfort connected with his request. I accept Ms. Stefak's evidence in this regard.

Ms. Stefak did indicate that she was prepared to assume, despite her discomfort, that Mr. Erickson, a careful and conscientious worker, had a legitimate reason for his request. She was reluctant to believe that he was searching for more evidence to incriminate Mr. Morin. Ms. Stefak reflected that Mr. Erickson might have wanted her to identify the type, quantity and location of the contamination. Unfortunately, this explanation is somewhat problematic if one examines the five things listed in her summary which Mr. Erickson instructed her to look for:

1. Any possible fibres in common between the exhibits of the accused and the exhibits of the deceased;
2. any additional red polyester or red animal hairs on all tapes and vacuumings;
3. any golden/orange or golden/yellow polypropylene or acrylic fibres similar to the Honda seat covers on the tapings from the deceased;
4. any light blue acrylic fibres similar to Christine Jessop's sweatshirt on the tapings from the accused;
5. dark blue acrylic fibres similar to the toque. (This last request was later abandoned when it was discovered that the toque did not originate from either Mr. Morin or Christine Jessop.)

It was suggested to Ms. Stefak that the nature of the examinations requested by Mr. Erickson indicated that he was searching for additional evidence in Mr. Morin's case. She initially seemed to agree:

Q. All right, so leaving aside number five, and directing my questions to numbers one to four, these sound like investigative requests referable to the Guy Paul Morin case. Am I right?

A. Yes.

Q. And further, they sound like investigative work to determine whether any additional evidence relevant to the case can be generated from these exhibits. Am I right?

A. Yes, it looks like that.

Q. I mean, in fairness, you indicated that a logical reason for examining materials already known to be contaminated, could be to ascertain where the contamination is, and basically, document the contamination; right?

A. Mm-hmm.

Q. But I guess what I'm suggesting to you is, that if one looks at what you're looking for, the four items that you're looking for, it appears that we're beyond that and you're being requested to look for potential evidence relevant to the Guy Paul Morin case. Am I right?

A. Yes, we're looking at fibres that go beyond the contamination.

Later, however, Ms. Stefak noted that the examinations requested could only be characterized as a search for further evidence if Mr. Erickson intended to include the results in a report for trial. Requests three and four might have been made in order to check the quality or accuracy of the earlier examinations conducted by Ms. Nyznyk. The problem with that position was that the related, earlier examinations of Ms. Nyznyk had not produced any findings. Finally, Ms. Stefak pointed out that, as far as she knew, no further tests were done on any of the contaminant fibres after her report was made, and she suggested this was evidence that Mr. Erickson was not trying to prove additional matches. On the other hand, she had already made it clear in her summary that she would not do any more work on the contaminant fibres.

In re-examination, Mr. Erickson was specifically asked about the requests he made of Ms. Stefak:

Q. Doesn't it sound like the kind of request that's being generated to produce evidence in a criminal case? I mean can one read that any other way?

A. Yes, we were looking at it in that light.

Q. Of course. I mean, this surely wasn't an academic exercise, simply to determine if there was contamination on the tapes. One doesn't engage in these comparisons simply to determine whether the tapes are contaminated.

A. But we knew the tapes were contaminated by our first observation.

Q. Of course.

A. And then we proceeded to look at what the contamination was. What was on the tapes in terms of fibres.

Q. So, I guess the question that I have for you, is if you know, as you've said, as of 1986 that the findings to be generated from contaminated tapes are valueless, why are these comparisons even being requested in 1990 and early 1991?

A. Again, I was just interested in what were the fibres on the tape.

Q. Just interested?

A. Yeah, in terms of reporting that when you get materials back to examine or re-examine, the exercise was that you can't do that sort of exercise, because of the contamination. And I was interested in what the contamination was.

Q. So the way to find out what the contamination was, is to compare fibres from the accused, the fibres of the deceased, looking for additional red polyester, additional gold yellow seat covers, acrylic blue — that's the way?

A. Yes.

Ms. Nyznyk testified that she was told during the second trial that the re-examination was conducted as a search for different types of fibres than the red contaminants. She did not recall who told her that. She testified that, after the contamination had been discovered, she would not have conducted a re-examination for any type of fibre because other types of fibres might be contaminants as well. She never expressed this concern to anyone because she did not “have a say in it” and she learned of the re-examination well after it was done.

Findings

I am unable to accept that Mr. Erickson requested the work outlined by Ms. Stefak merely as an “academic exercise.” The things Ms. Stefak was instructed to look for could only relate directly to the issues at the pending Morin trial. Ms. Stefak’s reluctance to do the work was fully justified. Perhaps Mr. Erickson was of the view that the contaminant fibres could be isolated and that further useful findings could be extracted from the tapings. Ms. Stefak’s unequivocal findings ended that endeavour.

(vii) Non-disclosure of the Contamination to the Prosecutors

Ms. Nyznyk and Mr. Erickson did not disclose the in-house contamination to the prosecution (or the defence) at the first trial or prior to or during the second trial. Mr. Cook testified that if he became aware of any real danger of contamination in a case, he would immediately inform all the parties involved. Mr. Lucas stated that Ms. Stefak’s 1990/91 summary of her findings should have been disclosed. Mr. Crocker testified that he would have disclosed Ms. Stefak’s summary.

Mr. Erickson initially stated that he failed to disclose Ms. Stefak’s summary because he felt it did not further either the Crown or the defence case. He later denied that he made a conscious or deliberate effort to suppress the information. He also denied that he was concerned that the disclosure would embarrass the CFS or expose any inadequate work by Ms. Nyznyk. He had confidence in the initial work done. He conceded that, although the contamination was unlikely to have affected Ms. Nyznyk’s work, it ought to have been disclosed.

Like Mr. Erickson, Ms. Nyznyk acknowledged that she never disclosed the existence of the contamination to either the prosecution or the defence. She believed that she just forgot about the issue, confident that the contamination had not affected her findings. She denied that she had been embarrassed either for herself or for the CFS.

Ms. Nyznyk accepted that the prosecution and defence were entitled to know about the contamination so they could make their own assessment of whether it was significant to her findings. She also accepted that she had been obliged to advise the Crown and defence of any possibility that the contamination affected her findings.

Mr. Erickson had the full opportunity to disclose the contamination to prosecutors in any one of a number of meetings held prior to trial. He did not. Nor did Ms. Nyznyk. More disturbing, the prosecutors specifically raised the issue of contamination with Ms. Nyznyk and with Mr. Erickson, in anticipation, no doubt, of a potential line of attack from the defence. Mr. Smith testified:

[C]learly, one of the issues we discussed with members from the Centre of Forensic Sciences was the potential for in-house contamination, if I can call it that, which — I mean, I haven't read that report. I've just heard about here, and through the press. But that seems to suggest that the most likely source for the contamination was in-house, and we had, I thought, very carefully with Mr. Erickson and Ms. Nyznyk gone through their practices to ensure that there would not be in-house contamination, and obviously, that report would bear very much on that issue.

Ms. MacLean testified:

In fact, Mr. Erickson and I discussed the issue of contamination at the laboratory, and he gave me a study which demonstrated that it was very unusual to have contamination within a lab.

I accept the prosecutors' evidence in this regard.

Findings

The evidence is overwhelming that Mr. Erickson and Ms. Nyznyk deliberately chose to cover up the in-house contamination. This was not done out of personal malice towards Guy Paul Morin or with any desire to convict an innocent person. They did believe, rightly or wrongly, that the contamination was unrelated to Ms. Nyznyk's findings. Of course, this was no excuse for their actions.

(viii) Ms. Nyznyk's Testimony at the First Trial

Ms. Nyznyk commenced her testimony on January 28, 1986, which she acknowledged was within two weeks of learning about the contamination. She agreed that she had not forgotten about it. She testified as follows at the Inquiry:

Q. I mean, you went and gave evidence in a first degree murder trial before a jury within a two-week time frame of finding out about this contamination, when everyone in your section's talking about it, but you chose not to talk about it in court; right?

A. Again, in court, the — again, the results, all the slides, the results were on slides already prior to no fibres were removed from those tapes for any of the trials.

Q. Which amounts to a statement by you that you chose not to talk about it. I mean, that's what you're saying. You're saying: I've decided in my mind that my findings had not been affected by contamination, so I chose not to talk about it in my evidence. That's what you're saying.

A. Essentially, yes.

(ix) Non-Disclosure at the Second Trial

The Pre-Trial Motions

During the pre-trial motions, Ms. Nyznyk was cross-examined as follows:

Q. Did you, Ms. Nyznyk, at some point, become aware in this case of something — I'm not sure if the technical term is correct; for want of a better word, something called contamination, a problem in the field of fibres, of fibres being transmitted sort of in the air, and contamination of fibres. Was that a present issue in this case throughout?

A. If I recall correctly, I think that was brought up at the first trial.

Q. Well, what is the answer to my question? Was it a matter of concern to you, however it was brought up, or whatever brought it to mind? ... [W]as it something that was of concern to you in this particular fibre analysis, given your expertise as an analyst?

A. Well, contamination is something we always have to be very careful with in every case we do. This case, no more so than any other case.

The Second Trial

Before the jury, Ms. Nyznyk was cross-examined extensively by Mr. Pinkofsky about various kinds of contamination, including contamination at the CFS or at the instance of the police investigators or through the environment. Ms. Nyznyk told me that she understood that Mr. Pinkofsky was trying to convey the impression that if the CFS had to take great precautions against contamination, it could easily have occurred when the police were at the body site or when they taped the Honda. It was suggested to Ms. Nyznyk that it would have been natural for her to mention the contamination which had occurred at the CFS. Ms. Nyznyk responded that the contamination did not affect her results and it did not occur to her to mention it. She also stated that she often gets cut off in cross-examination if she starts to volunteer opinions.

Ms. Nyznyk later expanded on this last explanation. She testified that in Court she answers questions with either a yes or a no, or specifically in terms of what was asked. This is what she was taught to do. She would never mention that contamination was found in a case unless she was specifically asked about it. She testified that she did not choose not to talk about the

contamination at the trials; it was just something that never came up.²⁸

Ms. Nyznyk was referred to several portions of her testimony at the second trial where the issue of contamination was arguably raised. Two examples follow. Ms. Nyznyk testified in cross-examination:

Q. Would you agree that if in fact in any case there has been contamination of clothing items that you are being asked to examine, ... then in those circumstances where that is the case, the value of any comparisons you could make is really kind of thrown out the window? The contamination makes that kind of situation sort of valueless and unreliable. Correct?

A. Again it would depend on the type of contamination that would be involved in the case itself. If I was aware of the contamination then I could take precautions against that type and any fibre types or something along that line, I would eliminate from my examination. It again depends on the case, if I am aware of the contamination or not.

She was then re-examined by the Crown:

Q. Finally, Mr. Pinkofsky raised the issue of contamination or risks of contamination. What I would like to ask you is, given the number of hair and fibre matches in this case, is it likely they're all due to contamination?

A. It's possible but I would consider it to be highly unlikely.

At trial, Ms. Nyznyk was also asked why she taped the items in the *Morin* case before letting any other scientists examine them. She responded that it was to preserve the fibres that were present on the items and *reduce the risk of contamination at the CFS*.

²⁸ This answer can be compared to the answers, reproduced above, which Ms. Nyznyk gave about her testimony at the first trial.

Exhibits Filed at the Second Trial

Several tapings (on acetate sheets) were made exhibits at the second trial. They were available in the jury room for the jurors to view during their deliberations. Those tapings had become contaminated by the time of the trial. Some contaminant fibres may have been visible to the naked eye. Ms. Nyznyk testified that it never occurred to her to mention the fact that the exhibits were contaminated, and thus presumably looked different than they did at the time of the original examination.

Findings

Ms. Nyznyk did not mention the in-house contamination at the first trial. She did not mention the in-house contamination at the second trial, despite the tenor of the questions directed to her. She denied that her testimony at the second trial was untrue. *Whether or not, strictly speaking, it was untrue, it was less than forthcoming on the issue of contamination. Without knowing about the in-house contamination, Mr. Pinkofsky asked questions which could reasonably be expected to elicit such contamination, if it existed.* This was not unlike the situation when Ms. Nyznyk initially testified before me.

Ms. Nyznyk may not have directed her mind to the fact that the jurors at the second trial were being provided with exhibits which were contaminated. However, the filing of contaminated tapings as exhibits, without acknowledgement of the contamination, was potentially misleading.

(x) Non-Disclosure by Other CFS Employees

Prior to this Inquiry, no one at the CFS disclosed the contamination to anyone — at least, anyone we know of — outside the Centre. The evidence reveals that the contamination was known to a number of CFS employees. Mr. Crocker stated that every analyst and technician who knew was obliged to disclose the information to the prosecution and the defence. I am not prepared to attribute responsibility to specific persons other than Mr. Erickson and Ms. Nyznyk. Some of these employees were entitled to assume that the section head of biology and the analyst directly involved would act responsibly.

Ms. Stefak is to be commended for taking affirmative steps to bring this matter to the attention of the Centre's Director and to this Commission. Having said that, I also appreciate that the institutional structures and hierarchy in place made it exceedingly difficult for employees to make their concerns known.

Ms. Scheffel's evidence is of interest in this regard. She testified that after Ms. Nyznyk discovered the contamination in 1985/86 it became the topic of social conversation in the laboratory. *People expressed the hope that Mr. Morin would not be convicted on the hair and fibre evidence. They were comforted, however, by the possibility that there might be lots of other evidence against him.*

Steps must be taken to better ensure that such concerns can be expressed, will be heard and will be acted upon.

(xi) The Causes and Timing of the Contamination

Conflicting views have been expressed before me as to whether the in-house contamination affected Ms. Nyznyk's fibre comparisons. Some of the evidence bearing upon that issue has already been highlighted. I now examine the potential causes for contamination advanced in the evidence.

Contamination Before the CFS Took Possession

Mr. Erickson testified that contamination can occur during the taping process — that is, the person taping an object could inadvertently drop or shed contaminant fibres onto the object or otherwise contaminate the object before it is taped and sealed in the acetate. There is no evidence that Inspector Shephard and Detective Fitzpatrick, who taped the interior of the Honda, contaminated those tapings. All the tapings of Christine Jessop's clothing and personal effects, all the Honda vacuumings and some further tapings of the interior of the car were performed at the CFS. These tapings and vacuumings were contaminated. It follows that much of the contamination cannot be attributed to the tapings performed by the police.

Contamination After the CFS Relinquished Possession

Mr. Erickson initially suggested that the contamination might have

occurred after the tapings and vacuumings left the CFS and before they were returned to the CFS for further review. He testified that the contamination had been caused by whoever had handled the tapings. He speculated that the tapings might have been handled during the Court proceedings, or by the police in order to take inventory for Court. When Mr. Erickson offered this theory, he was still asserting that he had 'discovered' the contamination in 1990/1991 after the tapings had been returned to him from the police. Ms. Stefak's 1985/1986 discovery of the contamination had not yet become public knowledge. When Mr. Erickson was later reminded of Ms. Stefak's earlier discovery, he accepted that the contamination would appear to have taken place at the CFS.

Storage

Both Mr. Erickson and Ms. Nyznyk pointed to the time when the tapings were stored after the initial examination of them was completed as a time when the contamination might have occurred.

As indicated earlier, an examiner removes a fibre from a taping by either lifting the taping off the acetate sheet or by making a V-shaped cut through the taping or acetate sheet thereby creating a wedge in the area where the desired fibre is located. After the fibre is removed, the examiner will normally press the taping or wedge back down onto the acetate sheet. Both Mr. Erickson and Ms. Nyznyk testified, however, that the taping or wedge will not always re-adhere. Mr. Erickson stated that the solvent used to remove the fibre can prevent the adhesive on the underside of the taping from bonding with the acetate sheet. Ms. Nyznyk said that the solvent can become sticky when it dries and cause a warping or bunching of the taping on the acetate. In either case, contamination of the underside of the taping becomes possible as loose fibres may attach to the exposed areas.

Mr. Erickson testified that all the tapings would have been stored together in a box. This could have allowed for the different sets of tapings to be contaminated by similar fibres. Mr. Erickson was later confronted with the CFS records of how the tapings and vacuumings were packaged when they were returned to the laboratory in 1990/1991 for re-examination. The records appeared to reflect that the tapings associated with Christine Jessop were not stored in the same box as the tapings associated with Mr. Morin, and that the Honda vacuumings were stored separately from the Honda tapings. Mr. Erickson then acknowledged that he could not explain how the same fibres

could have contaminated all the different items.

Although Ms. Nyznyk suggested that the contamination might have occurred when the tapings were put away in boxes, she was certain that the different sets of tapings were not stored together. The tapings associated with Christine Jessop were stored together in a file folder. The tapings done by the police were stored in the envelope in which they had been submitted to the CFS.

Fur Samples

Some of the contaminants found by Ms. Stefak were red animal hair fibres. These are less common fibres. The question arose, therefore, as to how such fibres could have accidentally contaminated so many different tapings and vacuumings. Mr. Erickson, Ms. Nyznyk and Ms. Stefak all suggested that the red animal hair contamination might have come from fur samples which were submitted to the CFS for comparison with the fibres found in the initial examination by Ms. Nyznyk.²⁹ These samples were not submitted until after Ms. Nyznyk had completed her examination, although they arrived before Ms. Stefak had completed her first examination.

The fur samples came in envelopes. Ms. Stefak believed that 18 of the envelopes contained some shade of red burgundy purple animal hairs. Many of these fibres were loose in the envelopes. Ms. Stefak and Ms. Nyznyk suggested that some of them may have inadvertently fallen on a desk when the envelopes were examined, and then later come into contact with the tapings. Ms. Nyznyk speculated that transfer to the tapings may have occurred when Ms. Scheffel mounted control samples from the fur samples; this was after Ms. Nyznyk had examined the tapings, and therefore after the addition of solvent might have allowed for contamination. Mr. Erickson suggested that the loose fur samples may have been transferred onto the tapings and possibly into the storage boxes when the tapings were packaged.

The fur samples were submitted to the CFS on December 20, 1985, and January 3, 1986. Ms. Scheffel testified that she first examined the samples

²⁹ Ms. Nyznyk was trying to find a potential source for the extraneous 'incriminatory' fibres which she found. The samples came from various clothing manufacturers in Ontario. After testing, it was determined that none of the samples were similar to the 'incriminatory' fibres.

on January 8, 1986. Ms. Stefak could not say when she discovered the contamination. However, as indicated above, she thought it was before the first trial (which commenced on January 7, 1986). She suggested that Ms. Nyznyk might have opened the envelopes and quickly looked at the fur samples before January 8th. Ms. Nyznyk testified that the samples were left in their envelopes until Ms. Scheffel mounted and identified them.

Ms. Scheffel testified that any suggestion that the contamination could have resulted from her examination of the fur samples was, in her view, preposterous. She said she examined the samples in her own room, she had last examined the tapings from the Morin case in June 1985, and no one else was working in her room. Ms. Nyznyk testified that Ms. Scheffel normally worked in the room where Ms. Stefak examined tapings.

Irrespective of whether the red animal hair contaminants came from the fur samples, the samples could not have caused all the contamination observed by Ms. Stefak in 1990/1991. Ms. Stefak found red wool contaminants on numerous tapings. None of the fur samples were wool fibres, and she accepted that none of the fur samples could have caused the red wool contamination.

Contamination During the Initial Examination

Mr. Erickson and Ms. Nyznyk offered several reasons why the contamination could not have occurred during the initial examination. Other evidence suggested that it could have occurred then.

Various witnesses, including Mr. Erickson and Ms. Nyznyk, stated that a trained examiner would have seen the contamination, if present during the initial examination. Ms. Nyznyk said that she did not see any contaminants during her examination. There were no fibres attached to the outside of the tapings. She agreed that others have to rely on her integrity and expertise to accept that she would have noticed any contaminants.

Ms. Nyznyk noted that Ms. Stefak reported that the contamination was visible to the naked eye. Ms. Nyznyk was shown the slides made of the

fibres Ms. Stefak observed in her 1990/1991 re-examination.³⁰ Ms. Nyznyk agreed that most of the fibres were microscopic and not visible to the naked eye. She pointed out, however, that at least two of the fibres were long red ones that were indeed visible. Ms. Nyznyk's opinion was challenged on the basis that Ms. Stefak (in 1990/1991) found many different types and colours of contaminants. Ms. Nyznyk agreed that this variety might indicate there was more than one contaminating event, and if that was the case, the more visible contaminants might not have been present at the time of mounting. Ms. Nyznyk still did not accept that even microscopic contaminants could have been present on the tapings she initially examined.

Mr. Erickson and Ms. Nyznyk were cross-examined on the possibility that contaminant fibres might have fallen onto the exposed areas of the tapings during the mounting process, and then been unwittingly removed by the examiner when she later returned to the same area of the taping. Each testified that, although contamination is not possible during the mounting process, it is possible afterwards when areas of the tapings cut during mounting (the 'wedges') remain exposed. Mr. Erickson indicated that the tapings would only be exposed for a very short period of time. He also testified that an examiner would not return to the exposed area to retrieve more fibres. Ms. Nyznyk testified that after making a cut in a taping, she may return to the taping and make other cuts very close to the first one.

Ms. Nyznyk testified that all the fibres she mounted during her initial examination were removed from the middle of the tapings. None of them were removed from the ends where the risk of contamination is greater. Ms. Nyznyk was also confident, 12 years after the event, that all the 'incriminatory' fibres she removed were embedded in the tapings. Mr. Crocker explained that fibres collected during the taping process tend to become embedded in the tapings as the tape is pressed against the object being taped, pushing the collected fibres underneath. Contaminants which subsequently fall onto the tapings, on the other hand, tend to sit on the surface of the underside. Ms. Nyznyk did not know whether any of the contaminants observed by Ms. Stefak in 1985/1986 were embedded in the tapings. Ms. Stefak was not asked about this issue.

³⁰ Ms. Stefak was not certain if all the fibres on these slides were contaminants. The slides she made in 1985/1986 could no longer be found.

Mr. Erickson and Ms. Nyznyk both testified that another reason why the contamination could not have occurred during the initial examination was that the examination of the tapings associated with Christine Jessop was completed and the tapings stored before the examination of the tapings associated with Mr. Morin began. As such, it was unlikely that the different tapings would be contaminated with similar fibres, as they apparently were. Ms. Nyznyk was confident that the two sets of tapings were never open at the same time. She agreed that it was reasonable that all the tapings must have been together when the contamination occurred. She further agreed that it was unlikely that two sets of tapings would both be contaminated with as uncommon a fibre as red animal hair if they were examined months apart.

It was suggested to Mr. Erickson that Ms. Nyznyk's notes of April 29, 1985, indicate that she mounted fibres from both Christine Jessop's clothing and the Honda on that day, thereby revealing a time when both sets of tapings would have been open at the same time. As noted above, Ms. Nyznyk rejected this suggestion in the context of a different issue. Mr. Erickson testified similarly. He suggested that Ms. Nyznyk probably worked on only one set of tapings on April 29th, but also examined slides previously made from the other set. He reasoned that it would have been impossible to have mounted on one day the hundreds of fibres listed in the April 29th notes. Mr. Erickson agreed that if Ms. Nyznyk had been assisted by a technician, it would be "a little different."

Ms. Stefak was questioned about the fact that she found so many tapings contaminated with so many contaminants. She thought the most logical explanation for this is that the contamination occurred when the acetate sheets holding the tapings were open. She further testified that the most logical reason for the acetates to be open is because they are being examined. She did not think that people opened acetate sheets for no reason.³¹

As indicated earlier, in her 1990/1991 re-examination, Ms. Stefak only found contamination in the vacuumings which appeared to have been previously examined. She agreed that this suggested that contamination of the vacuumings occurred at some time during their examination at the CFS. The

³¹ Despite this evidence, Ms. Stefak was reluctant to accept that the contamination could have occurred during the initial examination. She felt that any person trained in trace evidence would have noticed the contamination she observed in 1985/1986.

contaminants in the vacuumings were red animal hairs, the same type of contaminants which affected the tapings. Ms. Nyznyk testified that the vacuumings were never open in the presence of the tapings.

Safeguards Against Contamination

Mr. Erickson testified that the potential for accidental transfer of fibres between items is very great, and that fibre examinations necessitate the thorough application of preventative measures.

Ms. Nyznyk indicated that one item was taped at a time. The taping was performed on a table covered with brown craft paper. A new sheet of paper was used for each item. Tapings of the items associated with Christine Jessop and those associated with Mr. Morin were done in different rooms. The examiners wore lab coats and disposable gloves. When the tapings were later examined, the examiners again wore lab coats and gloves. An examiner would change her gloves when moving from one taping area to the next. But an examiner would only sometimes change her coat.

Ms. Nyznyk was the only witness to testify to the safeguards adopted during the Morin examinations themselves. Other witnesses gave evidence as to the safeguards which were normally employed during the same time frame.

Mr. Lucas said that in 1985 examiners always wore lab coats. Ms. Scheffel testified that although the examiners were supposed to wear lab coats (and she always did), the rule was not heavily enforced; she saw others working without coats. Ms. Sedgewick testified that a lab coat closed in the front, but she did not know if it covered the entire garment underneath, *i.e.* if the top chest area was left uncovered or the sleeves stuck out.

Mr. Lucas testified that examiners always wore disposable gloves. Ms. Sedgewick testified that although she regularly used rubber gloves, she did not always do so. She did not recall if she wore, or was required to wear, them when mounting fibres. Ms. Scheffel testified that examiners were only required to wear gloves while working in serology, and that she personally only started wearing them during fibre examinations after a problem with contamination was identified.

Ms. Nyznyk testified that although she always used brown craft paper in 1985/1986, it was not mandatory to do so. Ms. Sedgewick testified that she

mainly worked on bare tables which were washed down before each use. Ms. Scheffel testified that a rule mandating the use of craft paper was promulgated before she left the CFS in November, 1989, and after the problem with contamination.

Messrs. Erickson and Lucas testified that the victim's and accused's items were taped in different rooms. Ms. Scheffel testified that this rule came about *after* the problem with contamination. The rule was contained in a 1987 CFS circular. Mr. Lucas testified that CFS circulars generally codified existing practices, but sometimes established new procedures.

The Red Sweater

I have previously referred to the anonymous letter, alleging that Lynn Sedgewick handled items of trace evidence associated with the *Morin* case while wearing a red sweater, but no protective lab coat. The potential of a contaminating red sweater also arose in another way. A CBC news broadcast of September 16, 1985, showed a person at the CFS demonstrating how tapings are performed. Only the person's arms are visible. The unidentified CFS employee was wearing what appears to be a red sweater, exposed through his or her lab coat.

Ms. Sedgewick worked as a technician at the CFS from 1984 to June 1985. She did own a bright red wool sweater in 1984/1985, and might have worn it while working at the CFS. Ms. Scheffel and Ms. Nyznyk both testified that they saw her wearing a red sweater at the lab. Ms. Scheffel said the sweater was bright red and fuzzy. Ms. Nyznyk thought that someone — she could not recall who — told Ms. Sedgewick that the sweater was an inappropriate item to wear in the laboratory.

Ms. Scheffel could not recall if Ms. Sedgewick always wore a lab coat over her sweater. Ms. Sedgewick believed that she did, but could not be certain. Ms. Nyznyk indicated that Ms. Sedgewick was not working on the *Morin* case when she saw her wearing the sweater.

The evidence established that Ms. Sedgewick had contact with at least some of the items examined in the *Morin* case, but the exact extent of her contact was unclear. Ms. Sedgewick could not recall if she took any tapings from the Honda. Ms. Nyznyk was almost positive that only she and Ms. Scheffel did so. Ms. Scheffel agreed that the CFS notes of April 18, 1985,

reflect that she taped the seat cover found in the Honda. Ms. Sedgewick testified that she was present for the vacuuming of the Honda on April 24 and 25, 1985, but could not recall whether she assisted or just observed.

The CFS notes indicate that Ms. Sedgewick worked on items related to the *Morin* case on April 29, May 8 and June 17, 1985. Ms. Sedgewick accepted that she may have been exposed on those dates to all of the ‘items’ associated with Christine Jessop as well as the tapings and vacuumings from the Honda. However, she could not recall what work she performed, and the notes only indicate that she helped identify previously mounted fibres. Ms. Sedgewick did not know if she ever mounted fibres relevant to the *Morin* case. Ms. Nyznyk testified that she did all the fibre work herself, and that Ms. Sedgewick never removed or identified any fibres from tapings.

Mr. Erickson did not accept that someone’s red sweater could have been a factor contributing to the contamination. However, as noted above, he did telephone Lynn Sedgwick and Brenda Scheffel in 1990 or 1991 to determine whether either ever owned a red angora sweater. Mr. Erickson testified:

Q. Was there not some discussion back then about maybe somebody was wearing a sweater that could explain these fibres. I mean, that was one of the topics of discussion ...

A. That was one of the topics of discussion, but you have to appreciate that people wear lab coats, so I couldn’t accept that as a possible explanation.

.....

Q. Jumping ahead for a moment, we heard that you called several people, Ms. Sedgewick, and Ms. Scheffel, and asked them about sweaters they may have been wearing?

A. Yes.

Q. But you didn’t accept that as a possible explanation. Why ask them about it?

A. Because they were the ones that were working on it. I did that in 1990, prior to doing the re-examination

of this case.

Q. What had generated that?

A. Well, as you said, the discussion about possible contamination through a sweater. I wasn't prepared to accept it, but I had to satisfy my own mind, and I felt incumbent upon me to determine that that could not be a source of the contamination.

During cross-examination by counsel for the Morins, he stated:

Q. I suggest to you, sir, there's only one conceivable reason you call these two people and ask them if they ever owned red angora sweaters, and that's to see if Stefak findings could have been caused by them, when they did their original tapings.

A. No.

Q. When they did their original mountings and when they did their original examinations.

A. And I suggest you're wrong. I was concerned that the contamination that was found by Ms. Stefak, later could have been a result of them. But the initial examination I have no question was done in a proper fashion.

There could not have been any legitimate concern that Ms. Sedgewick had contaminated the tapings *after* Ms. Nyznyk's earlier findings. Ms. Sedgewick left the CFS in June 1985.

Traffic in the CFS

Ms. Stefak testified that the contamination could have been caused by someone coming into the room when the exhibits in the case were being examined. Ms. Nyznyk explained that it was possible someone standing in one room could accidentally pick up a fibre from one garment and later transfer it to a suspect's garment when the person moved to a second room. As indicated above, Ms. Nyznyk testified that an examiner would not always change her coat when moving between taping areas.

Mr. Lucas did not think that there would have been a lot of traffic between examination areas in the 1980s, but acknowledged that any traffic can potentially lead to contamination. He testified that there was no formal policy regarding movement between rooms, and visitors were not required to wear lab coats. He also agreed that examiners would not necessarily change lab coats in between examining different items.

Contamination Between Cases

Both Ms. Scheffel and Ms. Nyznyk agreed that contamination between cases was possible.

Ms. Nyznyk testified that an examiner would normally work on 10 to 20 different cases at the same time, sometimes in the same environment. This gave rise to the possibility of cross-contamination between cases. Ms. Scheffel testified that she would wear the same lab coat for several days while working on several different cases. She acknowledged that fibres from one case could adhere to her coat and later fall onto items from another case. Ms. Sedgewick similarly testified that she might have worn the same lab coat for several days while working on several different cases. Neither she nor Ms. Scheffel recalled any rules about changing lab coats between cases.

Findings

To state the obvious, it is entirely unsatisfactory to attempt, 12 years after the fact, to determine the causes of in-house contamination. The CFS failed in its obligation to properly and contemporaneously investigate the causes of the contamination. The decision not to reveal the contamination outside the CFS compounded the problem. The inadequacy of records as to who examined what trace evidence and when also compounded the problem. For example, the CFS witnesses could not even tell me with precision who assisted in the various Morin examinations and in what way they assisted. Forensic analysts and technicians must understand that their contact with trace evidence must be fully documented. My later recommendations address this issue.

It is now impossible to determine which of the many potential causes of contamination actually contributed to the contamination in this case. Dr. Young, relying on Mr. Hopen's findings that some contaminants and some

case fibres were indistinguishable, has conceded on behalf of the CFS that the original findings were tainted by contamination. Ms. Nyznyk and Mr. Erickson disagree. I am unable to exclude the possibility that the original findings were tainted based upon Ms. Nyznyk's evidence that she would have noticed the contamination. Not only could the contamination have been less pronounced on initial examination than it ultimately was, but the accuracy of Ms. Nyznyk's evidence (and her skills as a scientist) have been sorely tested at this Inquiry.

Even if Ms. Nyznyk and Mr. Erickson were correct that the contamination did not affect the initial findings, the contamination was serious. If Mr. Erickson truly believed that the police contributed to the contamination, why would he not discuss this issue with them to prevent contamination by them in other cases? Why would no steps be taken when the contamination was discovered to ascertain whether the contamination affected other cases?

Another point concerns me. The attitude of Ms. Nyznyk and Mr. Erickson appeared to be that contamination after Ms. Nyznyk's findings was irrelevant to the *Morin* case. But what if Guy Paul Morin was proven innocent? Would it not follow that the trace evidence might have to be re-examined at some point in the future in connection with another suspect or accused? Indeed, that is the present situation — the Metropolitan Toronto Police now have to contend with contaminated fibre evidence in their ongoing investigation. When Guy Paul Morin was acquitted *the first time*, should not Ms. Nyznyk and Mr. Erickson have drawn the contamination to the attention of the authorities, if they were truly objective and did not presuppose that Mr. Morin was guilty anyway? *In other words, the attitude that the contamination was irrelevant if it did not affect Ms. Nyznyk's original findings reveals an unconscious bias: the fibres findings were, in their minds, only relevant to the case against Guy Paul Morin.*

P. Failure to Communicate Exculpatory Findings

(i) Introduction

Mr. Erickson was questioned at some length about two types of fibres:

1. coarse yellow fibres from the seat covers and carpeting in the Morin Honda, which were not found on Christine Jessop's clothing; and
2. blue acrylic fibres from the sweatshirt worn by Christine Jessop, not found on the tapings from inside the Morin Honda.

When Ms. Stefak conducted her re-examination in 1990/1991, she made two findings over and above her findings of contamination. First, she found no blue fibres, similar to those that made up Christine Jessop's sweatshirt, on the tapings from the Honda. Second, she confirmed that Ms. Nyznyk had removed all the yellow fibres from the tapings of Christine Jessop's clothing; Ms. Nyznyk had determined that none of those yellow fibres were similar to those that made up the Honda seat covers and carpeting.³² Both of these findings are reflected in her February 5, 1991 "Summary of Textile Examinations." As we already know, this Summary was never disclosed to anyone outside the CFS. Mr. Erickson also failed to mention Ms. Stefak's findings in any conversations or correspondence with the prosecutors, the police or defence counsel.

Mr. Cook testified before the Inquiry that Ms. Stefak's findings concerning the blue and yellow fibres should have been disclosed. Mr. Erickson generally testified that the failure to disclose was inadvertent, but he once suggested that Ms. Stefak's findings had no probative value for either the defence or the Crown. *This suggestion does not survive scrutiny.*

(ii) Yellow Fibres

Mr. Erickson testified that prior to the second trial he had been concerned about the lack of coarse yellow fibres, similar to those found in the Honda, on Christine Jessop's clothing. Put simply, the concern was that one might expect Christine to have collected some of these yellow fibres from the Honda, had she been in it. Mr. Erickson advised the prosecutors of his concern, and examined the Honda seat covers because of it. He testified that he was ultimately satisfied that a number of variables could account for the

³² Ms. Stefak's finding demonstrated that Ms. Nyznyk had not missed any yellow fibres, and consequently confirmed that there were no similar yellow fibres on Christine Jessop's clothing.

lack of fibres: the seat covers were worn and did not shed much, the covers were found either under the seat in the car or in the Morins' house, and thus he could not be certain they were on the seats at the time of Christine Jessop's abduction. Further, Christine Jessop's clothing was not examined until six months after she might have been in the Honda, thereby allowing time for the fibres to fall off. Despite these factors, Mr. Erickson admitted at this Inquiry that the lack of yellow fibres on Christine Jessop's clothing remained a concern.

Mr. Erickson was asked about the lack of similar yellow fibres at the second trial. He explained their absence by the low shedability of the seat cover. *He did not mention that he was still concerned about the issue.* He also neglected to tell the jury that a study which he had given to the prosecutors revealed that the type of seat cover upholstery most likely to shed was the upholstery found in the Morin car, or that corduroy, which was the material of which Christine's trousers were made, was the type of fabric most likely to attract extraneous fibres. *He could not recall why he did not.*

Mr. Erickson advised Ms. MacLean on October 2, 1991, that his concern about the lack of yellow fibres had been addressed by the low shedability of the seat covers. Ms. MacLean testified that Erickson gave no indication that he still had concerns.

Mr. Erickson prepared a report of his examination of the seat covers on October 4, 1991. In it, he stated that Ms. Nyznyk had not found any seat cover or carpet fibres on Christine Jessop's clothing, and that the covers were worn and of low shedability. He neglected to mention Ms. Stefak's confirmatory finding or his continuing concern. Mr. Cook testified that Mr. Erickson should have expressed his concern in the report.

One of Mr. Morin's counsel requested a report about the yellow fibres in a letter dated March 27, 1991. Ms. Nyznyk prepared the requested report (dated November 1, 1991), even though she was no longer working at the CFS. It was suggested to Mr. Erickson that he had Ms. Nyznyk prepare the report so as not to have to disclose Ms. Stefak's confirmatory finding, which Ms. Nyznyk did not know of at the time. Mr. Erickson agreed that if he had prepared the report, it would have been hard for him to omit any reference to Ms. Stefak's re-examination. He explained, however, that Ms. Nyznyk prepared the report because she had done the examinations and she had determined that there were no similar yellow fibres on the tapings of Christine

Jessop's clothing. He had never seen the yellow fibres removed from the tapings. He added that Ms. Stefak's finding had not been surprising and had merely confirmed that Ms. Nyznyk had removed all yellow fibres.

(iii) Blue Fibres

One of the defence experts, John A. Reffner, expressed the opinion that the absence of any blue acrylic fibres, similar to those which made up Christine Jessop's sweatshirt, on the tapings from the Honda supported the proposition that Christine had never been in the car. In his evidence before the Inquiry, Mr. Erickson never expressly indicated whether he agreed with that opinion. His actions prior to the second trial, however, arguably indicated that he was concerned about the general issue of the transfer of fibres from Christine Jessop's clothing to the interior of the Honda. He requested that Ms. Stefak search for the sweatshirt fibres in her 1990/1991 re-examination. He examined the fibres from Christine's corduroy pants to see whether they were distinctive enough to locate on the car tapings.³³ He also discussed the general issue with the prosecutors. In particular, Mr. Erickson advised Ms. MacLean on October 2, 1991, that the fibres from Christine were too common to look for. He failed to mention that he directed Ms. Stefak to look for fibres which could come from Christine's sweatshirt. Ms. MacLean testified that she thought Mr. Erickson (and Ms. Nyznyk) once told her that all of Christine Jessop's clothing was too undistinctive to look for. *Mr. Erickson could not explain why he neglected to mention Ms. Stefak's work to the prosecutors.*

At the second trial, Ms. Nyznyk said that the absence of any fibres from Christine Jessop's clothing in the Honda was of no significance because the fibres were too common. When Mr. Reffner offered his opinion to the contrary, Ms. MacLean cross-examined him on the premise that no one had ever looked for fibres from Christine Jessop's sweatshirt in the car because the exercise would have been pointless.³⁴ Mr. Reffner acknowledged that if the fibres were too common to look for, one could not draw an inference from their absence that Christine Jessop had not been in the Honda. The trial judge

³³ If fibres are not distinguishable from extremely common fibres, such as cotton, forensic scientists do not search for them, since any findings could readily be attributed to coincidence.

³⁴ She also indicated in front of the jury that she had information to support that premise.

reminded the jury of this admission in his charge.

Findings Relating to Mr. Erickson

Because Ms. Stefak's search for fibres from Christine's sweatshirt (done at Mr. Erickson's request) was never disclosed, Mr. Reffner was cross-examined on a false factual premise, the prosecution made its submissions based on a false premise, and the trial judge charged the jury on a false premise. *Mr. Erickson bears the responsibility for this state of affairs. His failure to disclose demonstrates a misapprehension of his role as an independent, neutral scientist.* A scientist is not entitled to discount a potential defence position (or indeed a Crown position) and then fail to disclose evidence which might bear upon that position. Indeed, here we have something worse — *Mr. Erickson did not make full disclosure, despite his lingering concerns about the absence of certain fibres one might expect to find.* Mr. Erickson was too easily prepared to discount evidence which could favour the defence. I again note that the prosecutors bear absolutely no responsibility for this situation. They were entitled to rely upon the scientists. I also find that Ms. Stefak bears no responsibility for the failure to disclose her report. I accept her evidence in this regard:

A. I have no way of knowing what's reported. I believe I stated earlier that technicians do their work and hand it back to the scientist, and the scientist is the person who reports to the courts, who writes the reports and speaks with the court personnel such as lawyers and police officers. The technician basically is finished with their case when they turn the work back to the scientist.

(iv) Ms. Nyznyk's Testimony

At the second trial, Ms. Nyznyk testified about the various fibre findings which she made in Mr. Morin's case. She was then asked about all the other fibres she examined. Ms. Nyznyk responded that there were "no significant results" with any of those fibres. Counsel for Mr. Morin suggested to Ms. Nyznyk at this Inquiry that her answer was biased in favour of the prosecution: it implied that the other fibres produced no significant results for the prosecution. It ignored the fact that the absence of other findings potentially assisted the defence. Ms. Nyznyk rejected this suggestion. She stated that "no significant results" meant that she looked at the other fibres

and made no comparisons. She further stated that she would not have considered testifying at trial that the other fibre comparisons produced no results which assisted the prosecution, and that is something which may be of significance to the defence.

Ms. Nyznyk was asked about the same issue in reference to her reports. She testified that in her reports — and CFS reports in general — the phrase “no significant findings” is used to describe any findings where no positive comparisons were found. Thus, that phrase was used to describe the hundreds of fibre comparisons which did not result in findings of similarity.³⁵ At the same time, there was no reference in any of Ms. Nyznyk’s reports to hairs and fibres which could not have come from Mr. Morin or Christine Jessop. Ms. Nyznyk could not explain why not.

Mr. Lucas testified that the CFS cannot make reports so long that they are incomprehensible, and pointed out that an examiner’s notes are available for review. He did acknowledge that CFS reports might need to include more information about the limitations of the findings listed. Mr. Cook stated that reports from his laboratory are expected to look at the evidence from the point of view of the prosecution *and* the defence. He testified that the form of Ms. Nyznyk’s (and some of Mr. Erickson’s) reports would not currently be acceptable at his laboratory, although they would have been acceptable in the mid-1980s. My later recommendations address this issue.

Ms. Nyznyk was asked at the second trial about the fact that she had been unable to identify any dog guard hairs on Christine Jessop’s clothing, whereas she found large quantities of dog hairs inside the Morin Honda. Ms. Nyznyk testified at the trial that she would expect the guard hairs to have been washed away from Ms. Jessop’s clothing. It was suggested that this was an example of Ms. Nyznyk trying to rationalize away evidence favourable to the defence. Ms. Nyznyk acknowledged before the Inquiry that the evidence could be helpful to Mr. Morin, and that she would have expected to find some dog hairs on Christine’s clothing. She denied, however, that she was biased against the defence. She stated that in giving her answer at trial she was simply relating a fact; she would not have appreciated that it favoured the

³⁵ Mr. Erickson acknowledged that a defence counsel who is unfamiliar with forensic science might not know from the report that the positive findings made by the CFS came from an examination of thousands of fibres.

prosecution.

Q. Failure to Examine the Classmates' Hairs

Mr. Erickson examined hairs from Christine Jessop's classmates between the first and second trial, determining that two had microscopically similar hairs to the necklace hair.

Detective Fitzpatrick and Inspector Shephard testified that they brought hair samples from Christine Jessop's classmates to Ms. Nyznyk in May 1985, well before the first trial. Inspector Shephard stated that he thought it would be a good idea to check whether one of them could have been the source of the necklace hair. Both testified that Ms. Nyznyk said that she was too busy to examine the hairs. Inspector Shephard also testified that she asked them to keep the samples, and said that she would test them if she got time, but that it was more important to finish working on the fibre samples taken from the Honda and Christine Jessop's clothing.

Ms. Nyznyk initially explained her failure to test the classmates' hairs by noting that the police never formally submitted them to the CFS. She testified that if they had been submitted she would have examined them. She acknowledged discussing the classmates' samples with the officers, but believed she simply would have told them that she had a lot of work to do and that it would take a while for her to examine the hair samples.

Inspector Shephard acknowledged that he never formally submitted the classmates' hairs to the CFS by completing a submission form. He further acknowledged that doing so might have emphasized the importance of the examination.

Ms. Nyznyk agreed that the police discussed the hair samples with her with a view to having her examine them. She accepted that the police would have relied on her opinion as to the value of such an examination. She admitted that she was working under time constraints. She conceded that she did not recall exactly what she discussed with the police, and that she could not say how the decision was made not to submit the samples for analysis. Ms. Nyznyk ultimately accepted that events may have unfolded as described by Detective Fitzpatrick and Inspector Shephard:

Q. What I'm going to suggest to you, ma'am, is that

given the resource limitations, time limitations, that the scenario that is put forward on behalf of my client, that they brought — that's he and Shephard — brought exhibits, that is classmates hair, to the Centre, and were told words to the effect: I don't have time to do them now, and in any event there's other things that are more important to do now, that that is not an unreasonable scenario?

A. That is a possibility, yes.

Ms. Nyznyk later said that she told the police that she would not have time to test the classmates' hairs before any trial or preliminary inquiry, and asked them to hold onto the samples and submit them at a later date if necessary.

Ms. Nyznyk and Mr. Erickson both maintained that finding similarities with the classmates' hairs would not have significantly decreased the value of the necklace hair; Mr. Morin still could not be eliminated as a donor. However, Mr. Erickson could see the importance this finding could have to the defence. He acknowledged that time should have been set aside to do this testing, as he later did. There is no doubt that his later findings respecting the classmates' hairs were important to the defence. They illustrated, in the most visceral way, how little probative value should be given to the similarity between the necklace hair and Guy Paul Morin's hairs.

Inspector Shephard testified that if he had known that two of Christine Jessop's classmates could have been the donor of the necklace hair, he would not have felt that he had enough evidence in April, 1985, to charge Mr. Morin with murder.

R. Reporting Defence Positions to the Prosecution

(i) What Mr. Erickson told Ms. MacLean

On several occasions, Mr. Erickson advised Ms. MacLean about requests or information he had received from Mr. Morin's defence counsel. It was suggested that this reflected a lack of impartiality on his part. Mr. Erickson acknowledged that he would not normally call defence counsel on a case and tell him or her what the prosecutor just asked him. He did not

remember calling Crown attorneys in prior cases — he would not do so with the intent of reporting to them on defence counsel's activities.

Mr. Erickson called Ms. MacLean on April 18, 1990, and advised her that Mr. Pinkofsky had been at the CFS looking at the forensic reports. Ms. MacLean's note of the conversation follows:

Norm Erickson called and advised that Jack Pinkofsky was in today to look through the reports, etc. He asked about the red fibre on the shoe. Norm told him that was not one which was given to him for examination but was in Stephanie's report. I told Norm that all exhibits referred to a trial should have been given to him with the exhibit trays. He said he'd look again.

Mr. Pinkofsky also said he didn't have Stephanie's January 13/86 report re: polyester fibres on recorder + in car. Elizabeth Widner said they might have it back at the office so they'd go back and check. In any event, they saw both reports with Norm.

Mr. Pinkofsky asked why the numerous other hair samples (56?) from firemen, policemen + others, had not been examined for matches. Norm said it is a massive task + he would prefer not to do it. If he does it, Skip Palenik will have to come back again.

Jack Pinkofsky asked if the Crowns or police or anyone had directed the CFS to stop doing any further hair examinations once a match with Morin's hair was found. Norm Erickson said no, + that he was very offended by that suggestion.

Norm Erickson explained that the only test not done on the fibres was the thin layer chromatography test which is one which extracts the dyes, but due to small sample(s), it could not be done in this case.

They also went to see Nan McDonald.

Norm told me he called just to keep me informed of what was going on.

Mr. Erickson explained that he did not call Ms. MacLean to tell her what Mr. Pinkofsky wanted to know. He called her because Mr. Pinkofsky

was looking for the fibre found on the shoe, and Mr. Erickson was concerned that he did not have it. He just happened to relate all the rest of his conversation with Mr. Pinkofsky in passing.

Ms. MacLean also had notes of two other similar conversations with Mr. Erickson. On April 30, 1990 she wrote:

Norm Erickson called & said Pinkofsky asked about matters. Norm told him comments in letter apply to the microscopic comparison of any hair. (4 criteria would look for)

- no one-to-one correspondence between hairs, i.e. no one hair corresponds exactly to another, but similar characteristics

- discolouration of hair due to environmental conditions

- all of these will be put in a letter to Pinkofsky & sent to him by Norm - a copy will be faxed to us

On June 8, 1990, Ms. MacLean recorded the fact that Mr. Erickson told her that Ms. Widner, one of Mr. Morin's defence counsel, asked for a reference to an expert botanist. In his evidence before the Inquiry, Mr. Erickson explained that the April 30th conversation with Ms. MacLean occurred because he was forwarding to her, with Mr. Pinkofsky's consent, a letter he wrote for the defence about the classmates' hairs. He could not recall why he needed to advise Ms. MacLean of the request for the name of an expert botanist.

Mr. Erickson denied that he was intentionally supplying the Crown with information about what the defence was doing. However, he did say this:

Q. It doesn't exactly demonstrate a lack of partiality between Crown and defence; does it, sir, MacLean's notes?

A. In terms of two of those [conversations], I would agree with you, but in terms of the third one, no.

Ms. MacLean testified that she had not asked Mr. Erickson to keep her apprised of any inquiries from the defence, but she did not feel that Mr.

Erickson had acted improperly:

No, because there was no privilege between Mr. Pinkofsky and Mr. Erickson. And my understanding was that Mr. Erickson was discussing completely all of our issues with Mr. Pinkofsky, and that Mr. Erickson was discussing with us all the issues raised by both sides. I think Mr. Erickson — my impression of Mr. Erickson was that he was trying to be helpful to both Mr. Pinkofsky and the Crown, and just let us both be aware of all the issues and the answers he was finding in his examinations.

Mr. Cook testified that he would not normally pass on information about requests from the defence, but that he has no obligation to withhold such information. It casually comes up in conversation with Crown counsel. Mr. Lucas testified that there was nothing wrong with Mr. Erickson advising the Crown that he had spoken to the defence, but that it was inappropriate to describe the nature of the conversations which occurred. He felt that it showed favouritism to the prosecution:

Q. And then, sir, another unusual thing in this case is, as you know, Mr. Erickson is apparently reporting to the Crown on his conversations with Mr. Pinkofsky, puts down the phone and picks it up and calls the Crown? I mean that surely demonstrates without any shadow of a doubt at all that Mr. Erickson had lost the neutrality that is necessary to an employee of the Centre of Forensic Science; doesn't it?

A. Well, neutrality is not the word I would use, and ...

Q. Objectivity — sorry.

A. No, not objectivity. Again, I think it was something, as I said yesterday, that I don't think he should have done, but I think I also made it clear that we deal with our client. Had you been our client in this case or in any other case, it would have been just as inappropriate for him to make that comment to someone else.

Q. I disagree with you. That's not what happened. I'm worried about what happened here, not talking

about hypotheticals that happened in another circumstance.

A. Yes, as I said yesterday, that does trouble me.

Q. And I'm suggesting to you, sir, the reason that it's troubling is because it demonstrates that Mr. Erickson is not playing the role of the objective scientist, of a neutral scientist. He is showing clear favouritism to one side over the other.

A. To his client, yes.

Q. Yes. Well, that's what I was suggesting. His client, of course, was the Crown and police.

A. In this case, yes.

Despite this evidence, Mr. Lucas still felt that Mr. Erickson had not "crossed the line of objectivity" in the *Morin* case.

Ms. MacLean received a number of other phone calls from Mr. Erickson concerning the examinations conducted by a defence expert, Skip Palenik. Mr. Erickson advised her of Mr. Palenik's attendances at the CFS and his opinions about the similarities of the various hairs. Mr. Erickson was not asked about these phone calls. Ms. MacLean again felt that Mr. Erickson had done nothing improper. When Mr. Morin was ordered to stand trial for a second time, the Crown was obliged to pay for any further scientific work done by defence experts. Ms. MacLean indicated that Mr. Erickson was simply keeping her abreast of Mr. Palenik's further work. She also testified that Messrs. Erickson and Palenik knew each other quite well and were sharing all of their information.

(ii) Findings

I find that Mr. Erickson violated no existing policies or accepted norm in reporting to Ms. MacLean what the defence was doing and saying. However, this evidence does raise a systemic issue. The current CFS policy is that the defence is entitled to retain CFS analysts, but that a copy of any report generated must be forwarded to the prosecution. In other words, the defence enjoys no confidentiality when retaining the CFS. Of course, it follows that there is no policy of confidentiality where the defence questions

a CFS analyst already working on the case at the instance of the authorities. Witnesses at this Inquiry suggest that this situation fosters the appearance, and perhaps the reality, of partiality. My later recommendations address this issue.

S. Competence, Training, Supervision and Review

The Inquiry explored the competence of CFS scientists, their training, and the nature and extent of their supervision and accountability. This section of the Report summarizes the evidence heard during Phase II on these issues. They were discussed in greater depth during the systemic phase of the Inquiry.

(i) Accreditation

In the 1980s and early 1990s, the CFS was not accredited by any outside body. In the 1970s, the American Society of Crime Lab Directors (ASCLD) established standards for accreditation of forensic science laboratories. The CFS was accredited in 1993. Mr. Lucas testified that accreditation is a difficult, expensive and time-consuming process, involving a lot of documentation. Once obtained, accreditation is reviewed by an external body every five years. In addition, the laboratory must participate in external proficiency testing, and conduct an internal review every year.³⁶ External proficiency testing requires examiners at the laboratory to complete mock case examinations, designed and administered by individuals outside of the lab. Internal reviews require the laboratory to review its operations and certify to the ASCLD that it continues to meet the standards of accreditation.

Although Mr. Lucas testified that accreditation was difficult to achieve, it produced many more changes to the documentation required than to the operations themselves. Very recently, the position of an overall quality manager for the CFS was created. The other changes were more incremental in nature.

Mr. Lucas testified that the amount of external proficiency testing increased with accreditation. Each examiner is now tested once a year. In 1985, they were tested about once every two years. The proficiency tests are

³⁶ For some disciplines, such as DNA testing, the review is conducted externally, *i.e.* by an outside body.

not 'blind' tests, that is tests where the examiners do not know they are being tested. Mr. Lucas explained that although blind tests are preferable, they are difficult to produce and are generally detected by the examiners.³⁷

Mr. Lucas testified that there have always been systems of quality control and quality assurance in place at the CFS, although they have improved over the years and have been better documented since accreditation. He also noted that there have a number of changes to quality control procedures in the hair and fibre unit since the mid-1980s, such as the separation of items under examination, the use of different rooms to effect different examinations, and the reduction of potential contaminant 'traffic.'

(ii) Ms. Nyznyk's Training and Expertise

Mr. Lucas testified that in hiring a hair and fibre analyst, the CFS looks for someone with a minimum of a Bachelor of Sciences degree in biology or chemistry. Relevant work experience is considered, but it is rare to hire an experienced forensic expert from another laboratory. Once hired, the trainee is put through an apprenticeship program, working one-on-one with an experienced examiner. He or she initially works more as a technician than as an examiner, and then is gradually given increasingly complex exercises covering all the techniques that are used. A lot of reading material is assigned, covering the area of expertise, how to give evidence, and the organization of courts and government. He or she is given practical tests, and sometimes written ones as well. The trainee assists senior examiners on cases; goes with the examiners to court and testifies in mock court cases, with the last one being quite severe. The apprenticeship program lasts about two years. The trainee is subsequently provided continuing education. He or she is alerted to new literature, sent to relevant courses, and assigned to develop training manuals for new testing instruments. There are no periodic courtroom exercises, and courtroom testimony is only infrequently monitored, but the trainee's first court cases are usually watched by a senior examiner.

Mr. Lucas testified that the training process at the CFS was state of

³⁷ Mr. Cook testified that there is blind proficiency testing at his laboratory, but acknowledged that it is mostly internal testing. Mr. Lucas testified that external blind proficiency testing is preferable so that a range of laboratories can participate and norms can be established.

the art in the 1980s. He further testified that the notion and importance of independence was introduced into every new employee's mind from day one. Mr. Lucas himself specifically advised employees to inform counsel or the court if any relevant information does not come out at a trial. Mr. Erickson added that examiners were also taught not to overstate their evidence in court. Contamination issues, however, were not included in the training curriculum, although they are now.

Ms. Nyznyk testified that she joined the biology department at the CFS in 1979. She was trained in-house by Mr. Erickson on all the aspects of hair and fibre analysis. She also took some courses outside the CFS. Ms. Nyznyk confirmed that she participated in a mock court process. She said she was taught how to answer questions arising out of her report.

Ms. Nyznyk testified that she was first allowed to examine her own hair and fibre evidence in a criminal case in 1981. Before the *Morin* case, she testified as an expert in cases before the Ontario courts, including a first degree murder case, and worked on more than one homicide case. She also attended some further courses outside the CFS. She did not write any academic papers, but did write the CFS manual for the MSP machine.

Mr. Erickson testified that he had no concerns regarding Ms. Nyznyk's training or professionalism in 1985. She received two letters of commendation and Mr. Erickson never heard that she was not doing her job. Mr. Lucas testified that he never had to discipline Ms. Nyznyk for overstating her evidence,³⁸ but that there were some concerns regarding the management of her workload; she needed advice on staying focussed, keeping her work organized and getting it out on time. Ms. Nyznyk testified that she always succeeded on her proficiency tests, and Mr. Lucas confirmed that the tests never identified Ms. Nyznyk as a suspect scientist.

Findings

In my view, Ms. Nyznyk demonstrated significant inadequacies as a scientist. This had more to do with the lack of scientific rigour associated with the significance she attributed to her findings and with a lack of objectivity and impartiality than with her laboratory work. It is easier to

³⁸ He never had to discipline Mr. Erickson either.

monitor, supervise and review technical laboratory work. It is far more difficult to design an effective means to prevent partisanship, the overstating of evidence and loose and misleading language in the context of a criminal proceeding.

I heard some evidence relating to another case where a CFS hair analyst significantly overstated evidence in a criminal prosecution. With all due respect to Mr. Lucas, who was questioned about this event, I was unimpressed with the CFS' response to that situation. I found that the CFS demonstrated a lack of introspection about its own work and a resulting lack of effective supervision and accountability. My later recommendations address this issue.

(iii) Assignment of Cases

The question arose during the proceedings as to how Ms. Nyznyk became the principal forensic biologist involved in Mr. Morin's case. The Commission heard evidence that in the mid-1980s case work was assigned primarily on the basis of workload and not on the basis of seniority or expertise. Mr. Lucas testified that since there were only two people in the hair and fibre unit, and both were considered competent, Mr. Morin's case would have been assigned to the person with less work. Mr. Erickson confirmed that Ms. Nyznyk was considered competent to work on homicide cases.

Ms. Nyznyk testified that there was no system at the CFS in the 1980s that would have assigned a senior analyst to a particularly serious homicide case. Mr. Erickson testified that no thought was given to allocating cases in that way. He stated that the nature of the work was basically the same in homicides as in other cases, and an examiner only needed sufficient experience in court. Mr. Lucas confirmed that the seriousness of a case was less significant to the CFS than the difficulty of the examinations required. He noted that very simple examinations might be required in a very serious case.

(iv) Peer Review

The issue of peer review arose at the Inquiry. Peer review refers to the review of an examiner's work by another competent scientist before a final report is prepared. Much of the evidence heard by the Commission dealt with the systemic issue of whether there should be mandatory peer review of

findings in a subjective science like hair and fibre analysis. Some of the evidence, however, addressed whether there was any peer review of Ms. Nyznyk's findings in the *Morin* case.³⁹

Ms. Nyznyk gave very limited evidence on this issue. She simply said that Mr. Erickson reviewed and initialled every report in the *Morin* case. The evidence of Mr. Lucas, however, made clear that there is more than one type of peer review. Mr. Lucas referred to three. First, there is an administrative review, which he defined as a review "of the documentation looking at the case submission form to see what was involved, what sort of examinations were requested or required, were they done, does the report reflect the nature of the work that was done, and does the report appear to be consistent with that, and with professional standards." The second type of review is a technical review, which Mr. Lucas defined as "going through the entire case file and looking at the notes, looking at the charts, looking at whatever documentation is there, making sure that the appropriate documentation is there," and "to determine if that person could determine from reviewing those notes, that they could arrive at the same conclusion that was expressed in the report." Third, there is an actual re-examination of the findings. Neither of the first two types of review involve a re-examination of the findings. Mr. Lucas and Ms. Nyznyk indicated that re-examination only occurred occasionally. Mr. Lucas believed a technical review was done of the majority of cases in the biology section.

Mr. Erickson agreed with Ms. Nyznyk that he reviewed her reports, but gave somewhat confusing evidence on the nature of the reviews he conducted. He initially testified that he only conducted a type of administrative review: he looked at what the report was saying and whether the language was correct. He indicated that the reports were not subjected to a technical review.⁴⁰ However, Mr. Erickson later testified that he did conduct

³⁹ All of Ms. Nyznyk's findings were ultimately reviewed by Mr. Erickson in the late 1980s, when he became involved in the case after Ms. Nyznyk became ill. The evidence below refers to the peer review at the time of Ms. Nyznyk's original examinations.

⁴⁰ Mr. Erickson did not actually use the terms 'administrative review' or 'technical review.' However, his evidence seemed to make clear that he was referring to the actions described in those terms by Mr. Lucas. For example, he appeared to use the term 'peer review' to refer to a technical review. Mr. Erickson defined peer review as "somebody else should be able to pick up that file, and without actually redoing all the work, should be able to go through that file, and draw the same conclusions from materials within that file, and

a technical review of Ms. Nyznyk's reports, and thought her notes reflected her reported findings:

Q. So I hadn't understood it until just now, so you're saying you did not only an administrative review in the Guy Paul Morin case, but also a technical review of her work?

A. Well, I usually go through most analyst's reports, be it this case or any other case, just to see what the notes are, and the technical findings to see that they do support. Analysts come in and talk to be about it in terms of their notes, and discuss what should be done or what shouldn't be done, to support their conclusions, so there is ongoing dialogue in terms of these cases.

Mr. Erickson testified that Ms. Nyznyk did not discuss her findings or conclusions with him.

Finally, Mr. Erickson testified that he never conducted a re-examination of Ms. Nyznyk's findings until he himself became involved in the case. Mr. Lucas testified that a technical review can involve a re-examination of some items, and that he would have expected Mr. Erickson to have done that in Mr. Morin's case. In particular, Mr. Lucas stated that he would have expected Mr. Erickson to have re-examined the necklace hair.

Whatever peer review was conducted by Mr. Erickson in the *Morin* case, it failed to address the real problem here: the significance given to the hair and fibre comparisons, rather than the laboratory work itself. Indeed, for the reasons already given, Mr. Erickson's conduct was itself flawed. My later recommendations draw upon the lessons learned from this case.

(v) Lost Evidence

A number of items of evidence in Mr. Morin's case were lost at the CFS before the second trial. These items included four hairs, some of Ms. Nyznyk's work notes and work sheets, and all the 150-200 hair and fibre slides that were not made exhibits at the first trial, including the slides made

reach the same conclusion that the initial examiner had made.”

by Ms. Stefak in her 1985/1986 re-examination.

Ms. Nyznyk testified that she did not know how the evidence was lost. She last left the slides wrapped within a cardboard box, which was usually kept in a back storage room on the third floor of the CFS. She discovered they were missing just before the second trial when she looked for them in the storage room.

Mr. Erickson offered a potential explanation of how the slides might have disappeared. In the 1980s, a bio-hazard room was constructed in the biology section, and during the course of construction, materials were removed from the section. Mr. Erickson suggested that the *Morin* items may have been removed at that time, and somehow lost in the process. Mr. Erickson acknowledged that only items associated with the *Morin* case were missing.

But this, he said, was an isolated incident. Mr. Lucas confirmed that it was a very unusual, if not unique occurrence.

Mr. Erickson acknowledged that he did not immediately inform the Crown attorneys that the evidence was missing. He initially thought he informed them in an October 1988 meeting, but subsequently accepted the accuracy of a note written by Ms. MacLean, reflecting that the prosecutors were first advised on October 2, 1990. Mr. Erickson could not explain why he did not inform the prosecutors until that time.

When Ms. Nyznyk discovered that the items had been lost, she did not advise either Detective Fitzpatrick or Inspector Shephard. The issue first came up in a meeting with the prosecutors. Ms. Nyznyk did not advise the prosecutors at that meeting, however, that any of her work sheets were missing. This first came up in her cross-examination at the second trial.

Findings

The loss of evidence should have been reported to the prosecutors in a timely way. It was not. I do not find that the loss of this evidence demonstrated any malevolence on the part of anyone at the CFS.

(vi) Workload

Evidence was adduced before the Commission concerning the quantity of work assigned to the CFS in the mid-1980s. It was clear that the CFS, and, most particularly the hair and fibre unit, was saddled with a heavy workload. It is also clear that hair and fibre comparisons take a substantial amount of time. As reflected earlier, there was a concern in the 1980s about how Ms. Nyznyk was managing her workload.

Mr. Erickson testified that the CFS was in bad shape in terms of resources in the 1980s. There was a heavy workload and tight deadlines. Mr. Lucas concurred that there was insufficient staff at the CFS, and that a backlog developed. In the hair and fibre unit in particular, Mr. Erickson was trying to increase the number of personnel. At the time, he and Ms. Nyznyk were the only specialists in trace evidence, although they were assisted by two assistants and one trainee.

Ms. Nyznyk testified that there were time constraints in Mr. Morin's case. She was overworked, and there was no one available to offer relief. Mr. Morin's case was not the only one she had to work on. She normally had to juggle 15 to 20 cases at the same time.

Ms. Nyznyk testified that despite the workload, she carried out, as best she could, all the examinations she thought were useful. She acknowledged that she did not conduct a comparison between the necklace hair and hairs from Christine Jessop's classmates. She further acknowledged that her examinations had only been partially completed by the time of Mr. Morin's preliminary inquiry. She felt this was partly a result of her workload and partly a result of material not being submitted for analysis quickly enough. Ms. Nyznyk said she was not aware that Mr. Morin's trial once had to be adjourned because she had not yet completed her examinations.

Mr. Scott ultimately wrote a letter to Mr. Erickson on February 26, 1987, complaining about Ms. Nyznyk's pace of work and alleging, *inter alia*, that she had failed to produce some demonstrative aids when he had requested by the time of the first trial. This letter was substantially reproduced earlier in this Report. Mr. Erickson testified that before receiving the letter he had not known about any problems with Ms. Nyznyk's pace of work. He had spoken to Mr. Scott before receiving the letter, and did not recall Scott expressing any concerns over how the case was proceeding. Ms. Nyznyk also did not

discuss the problems with him. Mr. Erickson testified that he would have tried to address the problems had he been aware of them.

Ms. Nyznyk agreed that she had not discussed her time constraints with Mr. Erickson, explaining that he, too, was busy. Mr. Scott testified that the letter came about as a result of a complaint by Inspector Brown to Mr. Erickson about Ms. Nyznyk's slow pace. Mr. Erickson called Mr. Scott about the issue and asked him to put his concerns on paper, and hence the letter. Mr. Erickson ultimately accepted that Mr. Scott's evidence might be correct.

Mr. Scott also alleged in his letter that he and the police had often spoken to Ms. Nyznyk about their concerns over an impending trial for a man in custody. Ms. Nyznyk testified that she had not been aware of the pressure on the prosecution to move quickly with an in-custody accused.

Ms. Nyznyk did claim that she was pressured to perform the examinations quickly. She further testified that the pressure came from two sources: the police and Mr. Scott.

Ms. Nyznyk stated that Mr. Scott "was calling and pressuring and wanting everything done yesterday." Mr. Scott acknowledged that he was pushing Ms. Nyznyk to get the examinations completed. Ms. Nyznyk said she explained to Mr. Scott many times that trace evidence analysis is very labour intensive and cannot be rushed. Ms. Nyznyk testified that Mr. Erickson also ultimately expressed the same message to Mr. Scott. As reflected above, Mr. Erickson testified that he did not recall speaking to Mr. Scott about the speed at which Ms. Nyznyk was proceeding, at least until after he received the letter of February 1987.

As noted earlier in this Report, Ms. Nyznyk testified that Detective Fitzpatrick and Inspector Shephard gave her more attention prior to the first trial than she had ever received from other police officers. Ms. Nyznyk testified that most people wanted work done immediately, but they usually left her alone once she spoke to them. Detective Fitzpatrick and Inspector Shephard, were more persistent in wanting to know the results. Ms. Nyznyk testified that while there was nothing wrong with this, it was frustrating because she could not work while she was spending time talking to the police.

Detective Fitzpatrick testified that he and Inspector Shephard attended at the CFS several times to learn of the progress on the case, only to

be told that Ms. Nyznyk had not yet started work on it. He discussed the slow pace of the work with Mr. Scott. Inspector Shephard testified that he may have expressed concerns to the Crown attorneys, Ms. Nyznyk or her superior concerning the pace of Ms. Nyznyk's examinations and the fact that she was overworked.

Mr. Lucas testified that the CFS dealt with complaints about delay, particularly from police officers, on a daily basis. Mr. Erickson testified that police officers often inquire into the progress of examinations and why they are not proceeding more quickly. Crown counsel also frequently ask that their case be given priority or that the examinations be hurried. Mr. Erickson felt that the *Morin* case was no different than any other in terms of pressure to get work done on time.

Mr. Scott wrote in his letter of February 26, 1987, that he and the police were concerned that if they continued to pressure Ms. Nyznyk, the evidence that might be found would be lost. Ms. Nyznyk testified that she did not know what Mr. Scott was trying to insinuate. Mr. Scott explained that he meant that Ms. Nyznyk appeared to be sick, and he was concerned that she was not going to be physically able to complete her work.

Findings

I have already found that there was no impropriety on the part of Crown counsel or the investigators in attempting to get the work done in a timely way. No doubt, the investigators' attendances may have exacerbated, rather than relieved, Ms. Nyznyk's time constraints. Much of the work performed by CFS analysts and technicians is labour intensive and must be done with painstaking accuracy. Time constraints are always operative — for lawyers and for scientists. However, overloading through excessive workloads is an invitation for error. It can contribute to the conviction of the innocent and the exoneration of the guilty through sloppy or incomplete science. A recent survey of Ontario prosecutors suggests that the backlog at the CFS remains a critical problem. This issue is more extensively discussed in my review of the systemic evidence below.

T. 'Indications of Blood'

(i) Evidence of Robert White

Robert White, a forensic analyst with the Centre of Forensic Sciences, was called as a witness for the prosecution at both the first and second trials. He was an expert in serology (that is, bodily fluids). His testimony related to examinations he conducted on Christine Jessop's clothes for bodily fluids, including blood, and on the Morin Honda for blood.

He testified that testing for human blood is conducted at three levels.⁴¹ The first and lowest level is a phenolphthalein test in which a filter paper is rubbed on the item to be tested. After the addition of chemical reagents, a pinkish tinge on the paper means there is an *indication* of blood.

A second level of testing, the Takayama test, is conducted to confirm the substance to be blood. However, if the quantity or the quality of the substance is inadequate, the result will be inconclusive.

The third level of testing, the Precipitin test, determines whether the blood is of human origin. If enough blood is available, blood grouping can be done.

Mr. White testified that upon examination of Christine Jessop's clothing, he found no blood on some items, but identified heavy human blood stains on others, including the left sleeve of her blouse. In addition, Mr. White found 'indications of blood' on both pairs of socks and on various areas of the blouse. Mr. White did not conduct further testing on the indications of blood found on portions of the blouse and the socks in order to determine if human blood could be identified. Further, there was no attempt to group the identified human blood on the sleeve as comparison samples were not available.

More importantly, Mr. White also testified as to the results of his examination of the Morin Honda. The phenolphthalein test produced a positive reaction in three areas of the Honda, but the quantity of the substance detected was insufficient to enable its identification as blood. Therefore, there

⁴¹ This evidence assumes that DNA testing is unavailable.

remained only 'indications of blood' in the vehicle. These indications were found on the steering wheel and interior driver's door handle and on two areas near the centre of an eight inch long rusty metal rod found in a tool pouch in the hatchback. Mr. White testified that his notes reflecting 'very weak' areas on the steering wheel and door handle did not mean there were very weak indications of blood, only that the small quantity of stain meant that it took longer for the pink colour to appear.

Mr. White found no indications of blood on any of the four seat covers found in either the car or the Morin residence, nor did he find indications on Mr. Morin's pocket knife.

The stains in the Honda were not visible to the naked eye. It could not be determined whether the indications of blood were animal blood or human blood, whether they emanated from a rare cut of meat, fish blood, a squashed mosquito (which had ingested blood within a reasonable time) or dog saliva (if, for example, the dog had been chewing on a bone with raw flesh attached). No blood typing was possible and the age of the substance could not be determined.

The Honda was driven principally by Guy Paul Morin, but was occasionally driven by Alphonse Morin. It had also been driven by Guy Paul Morin's siblings before they moved out of the family home.

(ii) Defence Motion to Exclude

Mr. White's evidence of 'indications of blood' in the Honda was ruled admissible after a defence motion to exclude it during pre-trial motions before Donnelly J.

The defence position was that this evidence was not probative and that it invited the jury to draw speculative and prejudicial inferences, most particularly that the substance was Christine Jessop's blood. Such an adverse inference would be powerful, the defence said, in light of the scientific nature of the evidence and the 'aura of authenticity' emanating from the status of the Centre of Forensic Sciences.

The trial judge found that the probative value of the evidence substantially exceeded the potential prejudicial effect and that proper jury instructions would address the defence's concerns.

In his ruling, His Honour considered other links between the Honda and Christine Jessop which, taken in conjunction with the indications of blood, might connect Guy Paul Morin to the crime. In particular, he referred to the three hairs found in the Honda which were described as being ‘consistent’ with Christine Jessop’s hair and he referred to the fibres in the car which were similar to fibres found on Christine Jessop’s clothing.

The trial judge also noted other circumstantial evidence in the case, including the necklace hair, fibres found in the Morin residence which were similar to fibres associated with Christine Jessop, as well as Mr. Morin’s alleged statements to Mr. May, and overheard by Mr. X. The trial judge also noted that the Crown was applying to lead Sergeant Hobbs’ evidence as to further utterances by Mr. Morin. (This application was ultimately unsuccessful.)

I should note that the trial judge also approached the reception of other evidence on this basis. For example, in admitting Constable Robertson’s evidence that his dog detected Christine Jessop’s scent at the Morin Honda, the trial judge noted:

The evidence of the actions of the dog is not the only evidence linking Christine Jessop to the Honda car. There is also the scientific evidence of hair and fibre. The weight to be given to the dog scenting evidence must be considered in the context of the entirety of the Crown’s case.

Further, in ruling that the ‘necklace hair’ evidence was admissible, Donnelly J. concluded that

[t]he jury may then assess the probative value of the opinions about the hair comparison in light of other evidence at the trial. The evidence of the similarity of the hairs was tendered in the context of a predominantly circumstantial case as follows:

- 1) The necklace hair was, in Miss Nyznyk’s opinion, *consistent* with having originated from the accused.
- 2) Similar fibres were found
 - a) On the deceased’s recorder and in the Honda

automobile which was normally operated by the accused and which had been driven by him on October 3, 1984.

- b) On the deceased's running shoe and in the Honda automobile.
 - c) On the deceased's sock and in the Honda automobile.
 - d) On the deceased's jean pants and in the Honda automobile.
 - e) On the deceased's sweatshirt and in the Honda automobile.
 - f) On the deceased's turtleneck and in the accused's home.
 - g) As well, there was a match of animal hair found on the deceased's turtleneck sweater and on the living room rug of the accused's home.
- 3) Three hairs *consistent* with originating from the deceased were found in the Honda automobile.
 - 4) *Indications of blood were detected on the driver's door, the steering wheel, and on a piece of metal from the hatchback trunk of the Honda automobile.* (Emphasis added.)

(iii) Closing Addresses

In his closing address, Mr. Pinkofsky submitted that the 'indications of blood' evidence was a sign of Mr. Morin's innocence, given the absence of any finding of blood when one would expect abundant traces had Mr. Morin been the killer. Indeed, it was submitted, that indications of blood in an unclean and messy car would be normal.⁴²

⁴² In a taped conversation with Mr. May on July 1, 1985, Mr. Morin, in reference to this evidence, indicated that he could guarantee the 'blood' was his. He suggested that when working on the car engine his knuckles could be cut.

In the Crown's closing, Mr. McGuigan suggested that the indications of blood evidence took on meaning when considered in conjunction with the other evidence connecting the Honda to the crime:

[I]n addition to the hairs and fibres there was one other kind of trace evidence found in the car and that was blood, indications of blood.

Mr. White found indications of blood in one of the quarters of the steering wheel and there was also indications of blood detected on the inside driver's door handle. It was Mr. White's opinion that if fresh, liquid blood was present on a person's hands and he gripped the steering wheel and the door handle, it might be possible to detect traces of that blood even if those surfaces were examined a substantial period of time later.

Ladies and gentlemen, I acknowledge that on its own this evidence of indications of blood in the car is not of great significance. I submit, however, that it has to be considered in the context of the hair and fibre evidence which links the vehicle to Christine Jessop and in that sense it is capable of having significant probative value.

Mr. McGuigan could not recall, at the time of his evidence at the Inquiry, whether he discussed with Mr. White the significance of the evidence. He did not discuss with Mr. White the likelihood of finding such microscopic indications in other vehicles, but expressed his own view at the Inquiry that it would be rare to find such indications in other vehicles in those same areas.

Mr. McGuigan was asked by his counsel how he would feel had he not led this evidence and defence counsel suggested in closing that there was not a scintilla of blood in the Honda when one would expect there to be some. He replied he would have been very unhappy had that happened.

(iv) Charge to the Jury

The trial judge directed the jury that the evidence of indications of blood,

standing by itself is of limited weight. That evidence

must not be a foundation for unreasonable inferences or speculation.

[The evidence] should be viewed in the context of the whole of the evidence. In considering the probative value of that evidence, you may consider the interior driver's door handle and the steering wheel are areas that would be touched in the normal course of entering and operating the vehicle.

In reviewing the defence position, the trial judge said:

- The untidiness of the Honda car upon seizure April 22, 1985 is said to indicate nothing untoward happened in the car and there was no need to clean the interior.
- The indications of blood on the Honda detected by Mr. White are consistent with normal use of a family car and are unrelated to Christine Jessop. The absence of any further indications of blood in the car is inconsistent with that car being used by the killer.

(v) Potential for Misuse

One of the dangers of presumptive test evidence is its potential for participants in the criminal justice system to allow the evidence to take on a meaning beyond that which is actually expressed by the scientist. In his closing submissions (on the dog scent discrimination evidence), for instance, Mr. McGuigan referred to the 'indications of blood' as 'blood':

I respectfully submit that this dog evidence, if I can refer to it as that, takes on much greater significance in the light of all the other circumstantial evidence connecting the accused's car to this crime. That is the hairs, the fibres, the *blood* and the reaction that Paddy Hester got from the accused when she tried to search the same vehicle and the same door. (Emphasis added.)

And later, in dealing with various 'coincidences' pointing to Mr. Morin's guilt, "Isn't it a coincidence that *traces of blood* were found on the door handle and on the steering wheel of that same Honda motor vehicle?"

(Emphasis added.)

At the Inquiry, Inspector Shephard testified that he thought there was some significance to “the fact that there was blood” in or on the car. In interviewing Paddy Hester, a potential Crown witness, Detective Fitzpatrick told her about the “remnants of blood” on the steering wheel and door handle of the car.

Ms. MacLean, too, in her evidence at the Inquiry, referred to the “trace evidence of *blood*” and the “*blood* in the car” having limited probative value. She said the jury was told that it could not be determined whether it was even “*human blood*”:

But the fact that it had limited probative value didn't mean there was no reasonable basis in the evidence for them to infer it might be *human blood*. The scientist said it could be human blood, or it could be something else. (Emphasis added.)

Mr. McGuigan at the Inquiry expressed his understanding that while the evidence, alone, meant nothing,

[w]hat this evidence did show is that there was *blood*, as I recall it, in the crevices of the wheel, and in the door handle, which were not visible to the eye, but reacted to whatever they do to test for it.

In addition, there was *blood* on some instrument that was in a box, some kind of a tool or something of that nature ... And so it would be an indication that someone who had blood on their hands could have deposited that in those particular areas. (Emphasis added.)

Mr. Erickson was asked, on the basis of his experience in serology, whether the ‘indications of blood’ incriminated Mr. Morin. He told the Commission:

A. Possibly.

Q. All right. How?

A. Well, that's the amount that's left after this

occurred. But for it to stand on its own, I'd have to say not.

.....

Indications of blood to me as a scientist means that blood *could be* present. (Emphasis added.)

He also acknowledged, however, that to him, 'indications of blood' evidence did not mean "a whole lot." He was troubled and probably shocked by Mr. McGuigan's submissions to the jury that the 'indications of blood' evidence, coupled with the hair and fibre evidence, were capable of having significant probative value.

Roger Cook said that from time to time the U.K. Forensic Science Service reports presumptive testing, but added that "[it] can be misleading on occasions, and ... if it's going to be used, it should be used, but heavily qualified, perhaps." Mr. Lucas' opinion was that "preliminary tests have a value, but ... their limitations have to be expressed."

(vi) Findings

Mr. White fairly outlined his findings and their limitations. The prosecutors, having obtained a favourable ruling from the trial judge, as they did with the hair comparison evidence, were entitled to put the evidence before the jury. The real issues here relate to the correctness of the trial judge's ruling and the systemic issues which follow: should first stage or preliminary testing that yields nothing more than 'indications of blood' be admissible at the instance of the prosecution as circumstantial evidence of guilt? Does it acquire sufficient probative value for admission because of the existence of other evidence of the accused's guilt? These issues are addressed in the systemic evidence and in my recommendations, which immediately follow.

I agree that, had the defence asked the jury to draw an inference that Christine Jessop had not been in the car because there was no blood in the Honda, the prosecution would have been entitled to lead Mr. White's evidence to potentially negate that inference. Of course, that was not the basis for the trial judge's ruling, given at the outset of the trial. In other words, where the prosecution does not lead evidence, the defence can, by its conduct,

‘open the door’ to its reception.

U. Forensic Pathology

(i) The Autopsy

On January 2, 1985, between 10:12 a.m. and 12:25 p.m., an autopsy was performed on the remains of Christine Jessop, led by Dr. John Hillsdon-Smith, then the chief pathologist at the Coroner’s office and who is since deceased. Dr. Hillsdon-Smith was assisted by Barry Blenkinsop, his chief assistant, and Alison Collins, a student pathologist.

Dr. Hillsdon-Smith found the cause of death to be multiple stab wounds to the chest. He based his conclusion on the fact that there were cuts in the ribs overlying vital organs in the chest. Due to the advanced state of decomposition of the body, he was unable to say whether a sexual assault had taken place. Dr. Hillsdon-Smith did not testify at the first trial. At the second trial, he testified that he observed nothing inconsistent with death having occurred three to four months prior to the autopsy.

During the autopsy, some rib bones were found in the soil on the board on which Christine’s remains were transported to the morgue, and another rib bone was found in the soil collected from the ground beneath her remains.

There were no animal teeth impressions on any bones Dr. Hillsdon-Smith examined. At the second trial he testified that he did not have experience in identifying animal bites into muscle but his observations of the soft tissue suggested to him that there had been animal activity.

Dr. Hillsdon-Smith noted the following internal injuries:

1. two bruises in the left mid-frontal area of the scalp (blunt impact injuries);
2. a cut on the fourth lumbar vertebrae (just below the small of the back);

3. a V-shaped cut in the seventh right rib;
4. a superficial cut on the eighth right rib;
5. a V-shaped cut on the eighth left rib. Associated with this cut was a superficial crack feature;
6. a V-shaped cut on the sixth left rib.

Dr. Hillsdon-Smith concluded that the injuries were consistent with having been caused by a one-edged sharp knife, not more than half an inch wide. He could not provide an opinion as to the length of the blade.

Dr. Hillsdon Smith retained the four ribs and lumbar vertebrae to which he had noted injury. On February 2, 1989, he turned these bones over to Sergeant Chapman and Inspector Shephard. The latter signed a receipt for them. Dr. Hillsdon-Smith discarded two femur (thigh) bones after certain testing was conducted on these bones.

Dr. Hillsdon-Smith did not conduct an inventory of the bones. He explained at the second trial that once he formed an opinion as to the cause of death, he decided not to strip the bones of the flesh for examination, a process which would have delayed by a week the return of the remains to the next of kin.

(ii) Additional Findings

On January 4, 1985, Sergeant Michalowsky returned to the body site and found two more bones. He described the bones as:

1. a curved bone similar to a rib bone; and
2. a bone similar to a cervical (neck) bone.

Dr. Hillsdon-Smith testified at the second trial that he could not recall these bones being delivered to him for examination, nor was there any record of these bones being received by the pathology section.

On May 10, 1985, the Jessops found a number of bones at the body site and took them to the Durham Regional Police where Constable Lorne

Annis took possession of them. Constable Harry Shephard of the Identification Unit examined these bones and delivered them to the Centre of Forensic Sciences.

On May 15, 1985, six bones were received by Dr. Hillsdon-Smith from the Centre of Forensic Sciences. Dr. Hillsdon-Smith concluded⁴³ these bones were:

1. the right ninth rib;
2. the upper thoracic vertebra;
3. part of the neural arch (from the spine);
4. a fragment of the vertebra;
5. a fragment of an unidentifiable bone; and
6. a finger bone

There was no evidence of injury on any of these six bones.

(iii) Archeological Excavation

In September 1990, Katherine Gruspier and Grant Mullen, physical anthropology graduate students, were retained by the Ministry of the Attorney General to conduct an archeological excavation at the body site to determine whether there were further bones at the site or any other burial sites close by. A 30 square metre excavation was completed on October 30, 1990, which included the area identified as that where the body was found and the depression in which the Jessops had found bones on May 10, 1985. No further bones were found in the course of the excavation.

⁴³ In 1990 Dr. Snow identified the bones found by Jessops as four bones; the 5th and 6th thoracic vertebrae (the 6th thoracic vertebrae was in three pieces), a right rib and one phalanx (finger bone). It would appear that it became apparent that three of these bones constituted one (albeit incomplete) vertebrae only upon reconstruction by Dr. Duckworth, an anatomist, in 1990.

(iv) The Exhumation and Further Examinations

On October 30, 1990 the remains of Christine Jessop were exhumed for the purpose of making an inventory to determine whether the bones found on May 10, 1985 were part of Christine Jessop's skeleton.

On October 31, November 1 and part of November 2, 1990, Dr. Clyde Snow, a forensic anthropologist, examined the bodily remains. Dr. Jerry Melbye, a forensic anthropologist retained by the defence, and Ms. Gruspier and Mr. Mullen, students of Dr. Melbye, were present.

After conducting a bone inventory, Dr. Snow formed the opinion that all of the bones, including those found by the Jessops on May 10, 1985, belonged to a single skeleton which had been identified as that of Christine Jessop. He concluded that 94 percent of the bones could be accounted for. Eighty-seven and a half percent were present at the time of the examination. Other bones could not be located, including the bones found by Sergeant Michalowsky at the body site on January 4, 1985,⁴⁴ the discarded femur bones, and the bones retained by Dr. Hillsdon-Smith after the first autopsy which had been returned to the Durham police. Dr. Hans Sepp and Dr. Clyde Snow examined slides of the latter.

During the course of the inventory, it became apparent that a number of injuries had not been described at the original autopsy. Snow also concluded there had been some confusion in Hillsdon-Smith's identification of the 2nd lumbar as the 4th and of the 3rd rib as the 6th. Dr. Snow was of the view that forensic pathological expertise was required to further interpret this evidence. On November 1, 1990, Dr. Sepp, a forensic pathologist, examined the remains at the request of Dr. Young, the Chief Coroner of Ontario.

Dr. Sepp agreed with the conclusion of Dr. Hillsdon-Smith at the first autopsy that the cause of death of Christine Jessop was stab wounds to the body. The injuries he observed were consistent with having been inflicted by one instrument with a sharp cutting edge and a pointed end. He, too, believed there had been animal involvement with respect to the remains for the reason that part of the skin and muscle of the thighs was missing. Dr. Sepp and Dr.

⁴⁴ Dr. Snow concluded that the bone which Sergeant Michalowsky described as a cervical vertebrae was, in fact, a thoracic (rib-bearing) vertebrae.

Snow made the following findings which had not been noted at the first autopsy:

1. nasal bone fractures consistent with the application of blunt force. Dr. Sepp opined that while great force is not required to fracture nasal bones, the degree of force required to produce the injuries was sufficient to have caused unconsciousness;
2. a lesion on the lateral aspects of both the left second rib and right second rib;
3. complete severance vertically of the sternum in the upper part of the breast bone;
4. injury to the sixth thoracic (rib-bearing) vertebrae. A horizontal plane of this vertebrae was missing;
5. multiple cuts on the upper five cervical (neck) vertebra. Dr. Snow described these cut marks as “very, very subtle.” Dr. Sepp testified that these injuries were consistent with an unsuccessful attempt to sever the head from the body; and
6. a cut just above the wrist on the right forearm between the radius and the ulna bones (the two forearm bones). All experts concluded this “nick” was the result of an accident during cleaning of bones as it was not detected on X-rays taken prior to the examination.

There was disagreement amongst the experts as to the nature and cause of some of the injuries evident to the bones.

In his evidence at the second trial, Dr. Hillsdon-Smith testified that he did not detect certain injuries because, as indicated above, he ended the examination once he had determined the cause of death. However, he readily admitted that he was remiss in failing to detect, at the first autopsy, the fracture of the nasal bone and severed sternum.

(v) Findings

Dr. Hillsdon-Smith made some errors during the initial autopsy. He conceded that this was so at the second trial.

The injuries identified after the exhumation bore some relevance to the defence, as did the fact that all bones located at the body site emanated from Christine Jessop. For example, the defence alleged that the extensiveness of the injuries identified after the exhumation demonstrated that the perpetrator spent a substantial period of time at the body site which, in turn, made it less likely that Guy Paul Morin (given his presence at the family home) was the killer. It is unnecessary to assess how significant this evidence was to the defence. It had been fully noted by the time of the second trial. Accordingly, the inadequacies of the first autopsy did not contribute to the wrongful conviction.

V. Systemic Evidence and Recommendations**(i) Overview**

I have found, *inter alia*, that:

- the hair and fibre comparisons properly understood, had little or no probative value in demonstrating Mr. Morin's guilt;
- the limitations upon scientific findings were not accurately or adequately communicated to police, prosecutors, the defence and to the Courts;
- □ scientific findings were overstated at times;
- original evidence was contaminated while in the possession of the CFS;
- the evidence of contamination was suppressed; it was not revealed to the police, prosecutors, the defence or to the courts;