INQUIRY INTO PEDIATRIC FORENSIC PATHOLOGY IN ONTARIO

In the matter of the Public Inquiries Act, R.S.O. 1990, c. P. 41

And in the matter of the Order in Council 826/2007 and the Commission issued effective April 25, 2007, appointing the Honourable Stephen Goudge as Commissioner

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PART 1 - INTRODUCTION

1. This Commission of Inquiry, effective by Order in Council on April 25, 2007, was established to identify and make recommendations to address systemic failings that may have occurred in connection with the oversight of pediatric forensic pathology in Ontario from 1981 to 2001.

2. The genesis of the Commission, as expressed in the preamble to the Order in Council, was the report of a review undertaken by the Chief Coroner for Ontario ("Chief Coroner's Review") of certain cases of suspicious child deaths where Dr. Charles Smith ("Dr. Smith") performed the autopsy or was consulted.

3. The Chief Coroner's Review concluded, *inter alia*, that in twenty cases, Dr. Smith's opinion regarding cause of death and/or mechanism of death expressed in a post mortem report and/or oral testimony was not reasonably supported by the materials available for review.

4. An analysis of approximately 4500 documents on the public record of the Commission, the evidence of 93 witnesses and participants in policy roundtables and the research papers commissioned for the Commission leads to four undeniable conclusions.

5. First, Dr. Smith was the only witness at the Commission who unequivocally took responsibility for the errors in his work and for his contributions to the wider systemic failures identified through the work of the Commission. His willingness to do so, and his cooperation with this Commission, has no doubt made the discharge of the Commission's mandate more attainable.

6. Second, Dr. Smith did not make "errors" in 20 cases regarding the cause and/or mechanism of death. In fact, the evidence reveals that in many of the cases in which Dr. Smith allegedly erred in

rendering a diagnosis on cause or mechanism of death, his findings, opinions and conclusions were considered reasonable at the time the case was under investigation and/or prosecution, in light of the state of knowledge and then-accepted practices.

7. Third, Dr. Smith's work in the rarefied discipline of pediatric forensic medicine must be contextualized by four cultural truths which should temper any criticisms:

(a) First, pediatric forensic pathology is an interpretive, uncertain, evolving, complex and controversial science;

(b) Second, forensic pathology was an under-valued and under-resourced medical discipline in Ontario for many decades and, as such, basic tenets of forensic pathology, as distinct from pediatric pathology, did not inform the work of pediatric pathologists undertaking Coroner's work during the material time;

(c) Third, the concept of evidence-based medicine is relatively new; previously, pediatric pathologists were more willing to reach opinions taking into account history and circumstantial facts, less willing to diagnose cause of death as "unascertained" and were more expansive in their testimony;

(d) Fourth, the relationship between the criminal justice system and its fee-for-service pediatric pathologists could be characterized, at best, as a casual one, resulting in insufficient attention to the importance of continuity of evidence, post mortem reports that were not, on their face, user-friendly, a tradition of oral communication between the pathologist, the police and the Crown of forensically relevant facts and opinions, and the failure of the criminal justice system to sufficiently define and limit the role of expert evidence in criminal proceedings.

8. Fourth, these cultural attributes arose in an inadequate legislative and regulatory structure with a dearth of policies, procedures and guidelines to assist pediatric forensic pathologists in their work and, in hindsight, a system with insufficient accountability and oversight mechanisms.

9. While the Commission must recommend systemic changes using the benefit of hindsight, to judge Dr. Smith's conduct on that basis would be utterly unfair to him, and indeed to all of those who, in good faith, participated in pediatric death investigations. It would also run afoul of the caution expressly urged upon Courts when considering matters that occurred in the past:

> It is so easy to be wise after the event and to condemn as negligence that which was only a misadventure. We ought always to be on our guard against it, especially in cases against hospitals and doctors. Medical science has conferred great benefits on mankind, but these benefits are attended by considerable risks…we should be doing a disservice to the community at large if we were to impose liability on hospitals and doctors for everything that happens to go wrong. Doctors would be led to think more of their own safety than of the good of their patients. Initiative would be stifled and confidence shaken. A proper sense of proportion requires us to have regard to the conditions in which hospitals and doctors have to work. We must insist on due care for the patient at every point, but we must not condemn as negligence that which is only misadventure.
>
> **Reference:** *Roe v. Ministry of Health*, [1954] 2 All E.R. 131 (C.A.) at pp. 137-139

10. In fairness to Dr. Smith, and to enable this Commission to make appropriate recommendations for improvements in the policies, procedures, practices, accountability and oversight mechanisms, quality control measures and institutional arrangements for pediatric forensic pathology in Ontario as they relate to its practice and use in investigations and criminal proceedings, it is respectfully submitted that the Commission must both correct the fallacies in the conclusions reached by the Chief Coroner's Review and contextualize its findings. The public deserves to understand the full scope of the systemic failures, which ought not to be hidden behind an exaggeration of Dr. Smith's alleged inadequacies.

PART 2 - MANDATE OF THE COMMISSION

11. This Commission was constituted to explore institutional mechanisms in the practice and oversight of pediatric forensic pathology in Ontario between 1981 and 2001, and to make systemic recommendations to enhance public confidence in that field.

Reference: Order in Council 826/2007, at para. 4

12. Dr. Smith recognizes that to fulfill its mandate, the Commission must identify systemic failings that may have contributed to the loss of public confidence in pediatric forensic pathology and its role in the justice system. This process is essential to formulating recommendations to correct systemic failings and to prevent their recurrence.

13. This recognition is demonstrated by Dr. Smith's full cooperation with the work of the Commission. He disclosed relevant documents in his possession in a timely manner, he answered the inquiries of Commission Counsel in writing and he testified at the Commission for five days.

14. Additionally, Dr. Smith acknowledged and accepted responsibility for his contribution to certain systemic failings. He is the only witness at the Commission who unequivocally did so.

Reference: Statement of Dr. Smith, 11/11/2007, p. 28, line 15 to p. 32, line 4
Evidence of Dr. Smith, 28/01/2008, p. 28, line 24 to p. 9, line 16
Evidence of Dr. Smith, 28/01/2008, p. 156, line 21 to p. 157, line 13

15. Dr. Smith acknowledges and accepts that the identification of systemic failings requires the Commission to examine and comment on his work. However, the following principles should guide the Commission's ability to make findings that may adversely reflect on Dr. Smith:

(a) The Commission cannot, as a matter of law, conclude that an individual has breached any legal standard, whether civil, criminal or professional, and should avoid language that might convey a false impression that it has reached such a finding;

(b) The Commission may only make findings of misconduct where doing so is necessary to fulfill the mandate of the Commission, as defined by the Order in Council constituting this Commission, and in interpreting that mandate the Commission must take specific account of the fact that:

(i) the systemic mandate of this Commission is not to explain past events;

(ii) the Commission's mandate, as set out by Order in Council, expressly forbids reporting "on any individual cases that are, have been, or may subject to criminal investigation or proceeding" or "expressing any conclusion or recommendation regarding professional discipline matters involving any person or the civil or criminal liability of any person or organization";

(c) The Commission must be cognizant of the limitations of the factual record generated by this Commission and the resulting inability to reach certain conclusions of fact with an appropriate degree of certainty.

2.01 THE COMMISSION CANNOT REACH CONCLUSIONS OF LAW

16. The law governing findings of misconduct in the course of a public inquiry was established by the Supreme Court of Canada in *Canada (A.G.) v. Canada (Commission of Inquiry on the Blood System in Canada – Krever Commission)*. The Court in that case emphasized the distinction between a commission of inquiry and a court of law, noting that a commission of inquiry is neither intended nor empowered to reach conclusions of law:

> A public inquiry was never intended to be used as a means of finding criminal or civil liability. No matter how carefully the inquiry hearings are conducted they cannot provide the evidentiary or procedural safeguards which prevail at trial. Indeed, the very relaxation of the evidentiary rules which is so common to inquiries makes it readily apparent that findings of criminal or civil liability not only should not be made, they cannot be made.

Reference: *Canada (A.G.) v. Canada (Commission of Inquiry on the Blood System in Canada – Krever Commission)*, [1997] 3 S.C.R. 440, at para. 53 ("*Krever*")

17. The Supreme Court further cautioned not only against making findings of criminality or civil liability in the final report of an inquiry, but also against the use of language that might be construed by the reader as equivalent to such a finding:

> The conclusions of a commissioner should not duplicate the wording of the [Criminal] Code defining a specific offence. If this were done it could be taken that a commissioner was finding a person guilty of a crime. This might well indicate that the commission was, in reality, a criminal investigation carried out under the guise of a commission of inquiry. Similarly, commissioners should endeavour to avoid making evaluations of their findings of fact in terms that are the same as those used by courts to express findings of civil liability. As well, efforts should be made to avoid language that is so equivocal that it appears to be a finding of civil or criminal liability.

Reference: *Krever*, *supra,* at para. 52

18. Several Ontario commissions of inquiry have adopted the above principal from *Krever* and expressly acknowledged their inability to reach legal conclusions. For example, Commissioner O'Connor prefaced his report of the Walkerton Inquiry with the following cautionary statement:

> [T]hroughout the report, I occasionally use terms such as 'fault', 'responsible,' and 'accountable,' which could have a legal connotation. I do not intend, in this report, to reach any conclusions of law. Readers should attach the normal, non-legal meaning to words of this nature.

Reference: Ontario, *Report of the Walkerton Inquiry*, the Hon. Dennis O'Connor, Commissioner (Toronto: Ontario Ministry of the Attorney General, 2002) at 37 (*"Walkerton"*)

See also: Ontario, *Report of the Ipperwash Inquiry*, the Hon. Sidney B. Linden, Commissioner (Toronto: Ontario Ministry of the Attorney General, 2007) at 11

19. The Commission is bound by the Supreme Court's decision in *Krever* and must qualify any adverse findings made against individuals as not amounting to findings of legal fault or wrongdoing.

20. Moreover, this approach is the only one permitted by the mandate and limitations of this Commission set out by its constitutive Order in Council, discussed in greater detail below.

2.02 FINDINGS OF MISCONDUCT MUST BE NECESSARY TO FULFILL MANDATE OF COMMISSION

21. In addition to the limitation described above against findings of legal liability, the Supreme Court in *Krever* made clear that any findings of misconduct reached by an inquiry must be necessary to fulfill that inquiry's mandate:

> Findings of misconduct should not be the principal focus of this kind of public inquiry. Rather, they should be made only in those circumstances where they are *required* to carry out the mandate of the inquiry. [emphasis added]
>
> **Reference:** *Krever*, *supra,* at para. 53

22. It follows that any finding of misconduct must advance the mandate of the Commission as set out by the Order in Council. Findings of misconduct that do not advance the mandate of the Commission in accordance with its terms of reference would be *ultra vires* the Commission's authority.

23. To determine the scope of any findings of misconduct that the Commission may reach, it is thus important to assess the terms of reference set-out by the Order in Council establishing the Commission, to understand both the Commission's mandate and limitations.

2.02(1) The Central Mandate of the Commission is Not to Explain Past Events

24. The Order in Council establishing this Commission defines its mandate as follows:

> 4. The Commission shall conduct a systemic review and assessment and report on:
>
> a. the policies, procedures, practices, accountability and oversight mechanisms, quality control measures and institutional arrangements of pediatric forensic pathology in Ontario from 1981 to 2001 as they relate to its practice and use in investigations and criminal proceedings;
>
> b. the legislative and regulatory provisions in existence that related to, or had implications for, the practice of pediatric forensic pathology in Ontario between 1981 to 2001; and
>
> c. any changes to the items referenced in the above two paragraphs, subsequent to 2001 in order to make recommendations to restore and enhance public confidence in pediatric forensic pathology in Ontario and its future use in investigations and criminal proceedings.
>
> **Reference:** Order in Council 826/2007

25. While this section empowers the Commission to review and assess past institutional policies, mechanisms, legislative provisions and regulatory schemes, this is to be done with a view to making recommendations for systemic improvements.

26. Unlike other public inquiries, this Commission is not mandated to explain "what happened" in respect of a past event or sequence of events. It does not have, for example, the backward looking and expansive investigatory mandate of the Walkerton Inquiry by its Order in Council:

> 2. The Commission shall inquire into the following matters:
>
> (a) the *circumstances which caused* hundreds of people in the Walkerton area to become ill, and several of them to die in May and June 2000, at or around the same time as Escherichia coli bacteria were found to be present in the town's water supply;
>
> (b) *the cause of these events* including the effect, if any, of government policies, procedures and practices; and
>
> (c) *any other relevant matters* that the commission considers necessary to ensure the safety of Ontario's drinking water[.] [emphasis added].
>
> **Reference:** Walkerton Order in Council 1170/2000

27. The Order in Council establishing the present Commission contains no language directing the Commission to examine causative "circumstances" and "events" broadly defined. Rather, the Commission is to "identify and make recommendations to address systemic failings that may have occurred in connection with the oversight of pediatric forensic pathology in Ontario." Any past circumstances or events that are not systemic and that do not concern the oversight of pediatric forensic pathology in the period of 1981-2001 thus should not form part of the Commission's investigative focus.

28. In the result, the Commission should be reticent to make any adverse findings against individuals where there is no clear link between those findings and systemic failures of oversight in pediatric forensic pathology in the period of 1981-2001. To do otherwise would be an excess of the

Commission's jurisdiction. This follows not only from the mandate of the Commission, but also from the express limits placed in the jurisdiction of the Commission by the Order in Council.

2.02(2) Order in Council Forbids Pronouncement on Individual Cases or Matters of Professional Discipline

29. In addition to setting-out a purposive mandate as described above, the Order in Council establishing the Commission explicitly sets out what the Commission cannot consider. Specifically, the Order in Council observes that there are both ongoing and potential legal processes concerning matters of professional discipline, civil liability, and criminal justice that relate to the subject matter of the Commission. The Order in Council forbids the Commission from considering or pronouncing upon the "individual cases" involved in those processes:

> … WHEREAS the Chief Coroner for Ontario has announced that he has made the College of Physicians and Surgeons aware of the concerns identified in the Chief Coroner's Review;
>
> AND WHEREAS the cases that have raised issues with determinations of fact and opinion that were submitted as evidence in criminal proceedings are currently being dealt with through the disclosure of the findings of the Chief Coroner's Review to defendants in related criminal proceedings;
>
> AND WHEREAS there are processes in the Criminal Code of Canada for addressing individual cases of potential wrongful conviction;
>
> AND WHEREAS there are civil and criminal proceedings that have arisen as a result of Dr. Smith's work that are the appropriate forum for the adjudication of those matters;
>
> …
>
> 5. In fulfilling its mandate, the Commission shall not report on any individual cases that are, have been, or may be subject to a criminal investigation or proceeding;
>
> 6. The Commission shall perform its duties without expressing any conclusion or recommendation regarding professional discipline matters involving any person or the civil or criminal liability of any person or organization[.]
>
> **Reference:** Order in Council 826/2007

30. The importance of strict adherence to the limits of jurisdiction imposed on a public inquiry has recently been affirmed by the Court of Appeal for Ontario in *Ontario (Provincial Police) v. Cornwall (Public Inquiry)*. The Court of Appeal reversed a decision by Commissioner Glaude of the

Cornwall Inquiry in which he determined that he had jurisdiction to hear evidence on two alleged instances of sexual abuse and their handling by the provincial police. The court found the Commissioner to have exceeded his jurisdiction by failing to observe limiting language in the Order in Council establishing the inquiry. Specifically, the court noted that the preamble to the Order in Council confined the Commissioner to considering issues in relation to instances of alleged sexual abuse for which related police investigations and criminal prosecutions had "concluded." The effect was to prohibit consideration of cases that were or could become subject to fresh determinations of legal liability, a situation equivalent to the individual cases considered in this Commission.

Reference: *Ontario (Provincial Police) v. Cornwall (Public Inquiry)*, [2008] O.J. No. 153 (Ont. C.A.) ("*Cornwall*").

31. The Court of Appeal in *Cornwall* also noted an important distinction between evidence that may be admissible as having *relevance* to a public inquiry, as opposed to evidence that falls within the jurisdiction of the inquiry to consider and pronounce upon as part of its findings. Although the court found consideration of evidence of alleged sexual abuse by two complainants to be outside the jurisdiction of the Cornwall Inquiry, it nevertheless admitted the possibility of that evidence being admissible on the basis of peripheral relevance:

> Although the evidence of C12 and C13 falls outside the subject matter of the Inquiry, it could nevertheless be admissible if it were found to be 'reasonably relevant to the subject matter of the inquiry'[.] … It would meet that test if it had a bearing on an issue to be resolved and could reasonably, in some degree, advance the inquiry. … If the Commissioner believes that an item or body of evidence, though peripheral to the subject matter of the Commission, bears on an issue to be resolved and will in some degree advance the inquiry, so long as the Commissioner's view is reasonably based, the admission of the evidence will not constitute jurisdictional error.

Reference: *Cornwall*, *supra*, at paras. 64-65

32. This distinction demonstrates that an inquiry is neither obliged nor necessarily empowered to decide upon all matters or allegations of fact which arise before it on the evidentiary record. Indeed, there may be many matters or allegations "heard" by an inquiry which, while having evidentiary

relevance to the determination of issues within the inquiry's mandate, cannot *themselves* be decided-upon or adopted as findings of fact owing to the limited jurisdiction of the inquiry.

33. The above principle is clarified by the Divisional Court's decision in a further case arising from the Cornwall Inquiry: *MacDonald v. Ontario (Cornwall Public Inquiry)*. In affirming Commissioner Glaude's jurisdiction to hear evidence from certain alleged victims of sexual abuse, the court stressed the distinction between hearing allegations to assess broader issues of credibility bearing on the mandate of the inquiry, as opposed to hearing allegations to assess the truth of their contents – the latter constituting an excess of the Commissioner's jurisdiction. The court held:

> We accept that part of the Commissioner's mandate may include assessing whether the information available to the police or other authorities should have warranted a different response. However … we disagree that making such an assessment will require the Commissioner to make a determination as to the truth of the complaint. Rather, the Commissioner will have to ask, 'based on the information available, what should they have done'?
>
> As part of his mandate the Commissioner will be examining many decisions that were made in response to the allegations. These may include whether or not the police decided to lay criminal charges and whether or not the Crown decided that a prosecution should be conducted. In examining those decisions he will be required to do so from the point of view of whether they were justifiable on a reasonable basis, given the obligations of the particular authorities at the time. This will necessitate hearing evidence as to what was done and why. It may also include assessing whether, given what they knew at the time, the police or the Crown acted reasonably when they made decisions as to whether or not a particular allegation was credible enough to warrant the laying of a charge or the commencement of a criminal prosecution. Assessing the reasonableness of these decisions will not require the Commissioner to make findings that the allegations were true and will certainly not require him to make a determination that the Applicant was criminally or civilly responsible.
>
> **Reference:** *MacDonald* v. *Ontario* (Cornwall Public Inquiry), [2006] O.J. No. 3546, at paras. 14-15 ("*MacDonald*")

34. The reasoning in *MacDonald* is of considerable guidance to this Commission. Like the Cornwall Inquiry, this Commission has heard numerous allegations that are relevant to the Commission's task of assessing systemic issues and making related recommendations. However, determining the truth of the allegations themselves would exceed the Commission's jurisdiction.

35. It is common ground that this Commission arose in relation to twenty cases in which the pathological opinions of Dr. Smith have been questioned. In the course of this Commission, the

Commission heard evidence bearing on nineteen of these cases specifically.[1] The amount of evidence called related to each case varied; some were canvassed extensively while others were only superficially addressed. Among the factual allegations raised in evidence before the Commission has been the suggestion that certain of these cases involve miscarriages of justice, and that Dr. Smith personally caused or contributed to the alleged miscarriages. These allegations fall squarely within subject matter expressly excluded from the jurisdiction of this Commission: they concern *individual* cases subject to potential civil liability or disposition in the criminal justice system. While the Commission is empowered to hear the allegations and weigh their relevance to the systemic issues in its mandate, it may neither accept nor reject the "truth" of the allegations as findings of fact.

36. This conclusion is confirmed not only by the terms of reference governing this Commission, but also by the natural limits on the quality of evidence received by the Commission as a function of those terms

2.03 THE COMMISSION'S FACTUAL RECORD CANNOT SUPPORT CERTAIN FINDINGS OF MISCONDUCT

37. The Supreme Court of Canada has highlighted the difficulty of "getting at the truth" in the context of a public inquiry involving multiple parties and interests, and in light of the obligation to afford procedural fairness to participants. Iacobucci, J. noted for the Court in *Consortium Developments (Clearwater) Ltd. v. Sarnia (City)*:

> I want to emphasize that the concerns of individuals caught up in judicial inquiries are real and understandable. Unlike an ordinary lawsuit or prosecution where there has been preliminary disclosure and the trial proceeds at a measured pace in accordance with well-established procedures, a judicial inquiry often resembles a giant multi-party examination for discovery where there are no pleadings, minimal pre-hearing disclosures (because commission counsel, at least at the outset, may have little to disclose) and relaxed rules of evidence. The hearings will frequently unfold in the glare of publicity. Often, of course, at least some of the participants will know far in advance of commission counsel what the documents will show, what the key witnesses will say, and where

[1] The Commission elected not to examine the pathology or the death investigation more generally in the X case. As such, no findings can be made in respect of that case.

> "misunderstandings" may occur. The inquiry necessarily moves in a convoy carrying participants of widely different interests, motives, information, involvement and exposure. It is a tall order to ask any Commissioner to orchestrate this process to further the public interest in getting at the truth without risking unnecessary, avoidable or wrongful collateral damage on the participants.

Reference: *Consortium Developments (Clearwater) Ltd. v. Sarnia (City)*, [1998] 3 S.C.R. 3, at para. 41 ["*Consortium*"].

38. The characteristics of a public inquiry described above are certainly present with respect to this Commission. While the Commission has heard from 93 different witnesses who, as noted in *Consortium*, exhibited a range of interests, potential motives, information, involvement and exposure to issues of interest to the Commission, it has not heard *viva voce* evidence from the principal players in every death investigation. For example, each case under consideration has involved investigating police officers, prosecuting Crowns, defence counsel, an Investigating Coroner (and often the Regional Supervising Coroner) and other medical experts who have critical evidence about the death investigation and related criminal proceedings. While the Order in Council enables the Commission to rely on "representative witnesses", such witnesses cannot fill the evidentiary vacuum in terms of each individual case to the extent necessary to make findings of fact.

Reference: Order in Council 826/2007, at para. 8

39. *Viva voce* evidence is particularly important when considered in light of the obvious tradition of oral communications that existed in the coronial system in the 1980s and 1990s. The only party to a death investigation that appears to have regularly taken notes of conversations and other matters were the police. But, as the Commission will no doubt be aware, it would be imprudent to rely exclusively on the impressions, observations and recordings of a police officer when considering complex issues such as pediatric pathology and other inter-related matters. Moreover, the police are not privy to significant aspects of death investigations and prosecutions and would not have notes of key events therein.

40. Nor can the Overview Reports fill the vacuum. These reports, while serving a useful purpose at the Commission to facilitate the witnesses' testimony, were written based on the documentary record available to the Commission at the time they were prepared. This record is admittedly incomplete, reliant as it was on the record-keeping of the parties, as well as the disclosure decisions made by the parties. There are demonstrated holes in the documentary record. As noted in *Consortium*, the "pre-hearing" disclosure of key evidence prior to related testimony in this Commission has not always been perfect. This is evidenced by the recent disclosure of highly relevant documentary evidence tendered by the Mullins-Johnson Group, some in the last week of the hearings phase, some *after* completion of the hearings phase.

Reference: Email from Ava Arbuck to all parties, 07/02/2008
Email from Heather Hogan to all parties, 22/02/2008

41. Commission counsel has acknowledged that they did not seek disclosure from the defence counsel involved in the criminal proceedings arising out the deaths of Tiffani, Delaney, Taylor and Katharina, as those individuals did not seek standing. With respect to the parties with standing before the Commission, Commission counsel has confirmed that it did not seek full disclosure from them and did not seek a listing of documents over which they claimed privilege and instead have relied upon counsel to produce relevant, non-privileged documents that were not otherwise produced by other parties with standing (particularly, the Ministry of the Attorney General).

42. Moreover, the Overview Reports have been revealed to be incomplete and, in some instances inaccurate, based on the oral testimony heard at the Commission and subsequently disclosed documents. For that reason alone, they have become unreliable as a complete or accurate account of the death investigations in the nineteen cases under review.

43. The complexity of this Commission is underscored by the fact that its formation does not arise from a single event, but rather from nineteen different "cases" in which pathological findings have been questioned. For each of these cases, and to varying degrees, the Commission has heard evidence on: conflicting pathological opinions; autopsy processes; interaction between pathologists, coroners, police, and Crown attorneys; various stages of police investigations; various aspects of court testimony; and the ultimate disposition of cases by the justice system. No single item in this evidentiary record has been explored in sufficient detail, admitting an appropriate range of varying opinions and versions of events, for the Commission to decide upon the "truth" of a particular allegation of fact. Rather, the record supports qualified inferences of fact to the extent necessary to reach systemic conclusions and formulate systemic recommendations.

44. Guidance is provided to the Commission's task in this regard by the Report of the Morin Inquiry. Commissioner Kauffman stated in his Report that while he was entitled to reach findings of fact in furtherance of his systemic mandate, a heightened degree of certainty, approaching the "criminal standard", was warranted where such findings concerned individual misconduct:

> The rules of procedure which govern public inquiries generally, and this inquiry in particular, permit the reception of evidence which might not meet the strict test for admissibility in criminal or civil proceedings. My approach at this inquiry was to receive such evidence primarily where it related to systemic issues, rather than issues of personal or institutional misconduct. In making findings of misconduct, I relied heavily, by analogy, upon the principles which govern the admissibility of evidence in criminal proceedings. Generally, a relaxation of those principles favoured a party against whom misconduct was alleged. … I am entitled to make findings of fact which are demonstrated to my satisfaction on the balance of probabilities. However, where findings involve misconduct of named parties, potentially affecting reputations and professional standing, a higher degree of proof, *closer to the criminal standard*, is appropriate. This approach accords with the jurisprudence in this area which speaks of clear and convincing proof, based upon cogent evidence. [emphasis added].
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> **Reference:** Ontario, *Report of the Commission on Proceedings Involving Guy Paul Morin*, the Hon. Fred Kauffman, Commissioner (Toronto: Ontario Ministry of the Attorney General, 1998) at paras. 4 and 6

45. As noted previously, several allegations that have been raised in this Commission impute very serious misconduct against Dr. Smith. Some parties have alleged or implied that Dr. Smith has

committed deliberate acts of malfeasance. In particular, it has been alleged that Dr. Smith has knowingly made false statements; that he has taken deliberate actions to conceal alleged "errors"; that he has suppressed evidence; and that he has allowed improper motivations, including alleged bias against particular socio-economic and cultural groups, to taint the independence of his pathology.

46. Not only do these allegations step beyond the jurisdictional scope of this Commission, they are completely lacking in foundation upon the evidentiary record, are denied by Dr. Smith, and conflict with other evidence. Adopting the approach suggested by Commissioner Kauffman, the Commission cannot conclude that he has a sufficient factual record on which to decide the "truth" of the allegations, or lend them credibility with an acceptable degree of certainty.

PART 3 - NATURE OF PEDIATRIC PATHOLOGY

3.01 PEDIATRIC FORENSIC PATHOLOGY IS AN INTERPRETIVE SCIENCE

47. Many of the physicians who testified at the Commission cited the interpretive nature of forensic pathology as being the confounding factor in the inter-relationship between the administration of justice and forensic pathology.

Reference: Evidence of Dr. Pollanen, 15/11/2007, p. 7, line 16 to p. 10, line 5
Evidence of Dr. Crane, 22/11/2007, p. 8, lines 8 to 14
Evidence of Dr. Whitwell, 13/12/2007, p. 128, line 6 to p. 130, line 8
Evidence of Dr. Smith, 31/01/2008, p. 9, lines 4 to 19

48. At the heart of forensic pathology is the autopsy, which, in and of itself, is a human endeavour, dependant on the technique, observations, experience and judgment of the pathologist performing the examination.

Reference: Evidence of Dr. Pollanen, 05/12/2007, p. 60, line 12 to p. 61, line 25

49. Even if two qualified pathologists reach identical conclusions as to the abnormal findings on autopsy, there remains a significant possibility that they will offer different interpretations of those findings. Succinctly, pathologic changes occur on a continuum and in respect of many forensically relevant diagnoses, there are no established criteria to guide pathologists.

Reference: Dr. Michael Pollanen, "Review of Pediatric Forensic Pathology Overview Reports: Ten Systemic Issues", PFP301189, at pp. 6-7 (Pollanen, "Systemic Issues")

50. Dr. Pollanen gave some examples in his testimony of forensically significant areas for which there are no established diagnostic criteria. For example, in all of the Paolo, Tamara, Valin and Joshua cases, a positive finding of neck bruising or hemorrhage raised the consideration of possible neck compression as the cause of death. Unfortunately, as acknowledged by Dr. Pollanen, there

were no universally recognized diagnostic criteria for death caused by neck compression either in the 1990s or today.

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 66, line 24 to p. 68, line 12
Parts 7 and 8

51. In an article written by Dr. Pollanen he explains that the signs of strangulation form a spectrum "from minimal to marked" and that "there is no consensus [amongst pathologists] as to what constitutes the minimal number and nature of lesions" to enable a diagnosis of homicidal neck compression. This presents a diagnostic quandary for pathologists, as it did for Dr. Smith in those cases.

Reference: Dr. Michael Pollanen, "Subtle Fatal Manual Neck Compression", Med. Sci. Law (2001) Vol. 41, No. 2, PFP032700, at p.1 (Pollanen, "Neck Compression")

52. Dr. Pollanen also testified that there are no universally recognized criteria for the post mortem diagnosis of ano-genital injury from sexual assault and acknowledged the difficulty facing pathologists in determining what constitutes minimally sufficient evidence to make the diagnosis when there is no obvious or marked trauma. On the lower end of the injury spectrum, there is likely to be a reasonable variation of interpretation of autopsy findings. It is not surprising that Dr. Pollanen, in his consultation report in the Valin case, describes this area of pathology as one of the most difficult and controversial. It also goes a long way to explain the breadth of opinion offered on Valin's ano-genital injuries by the four pathologists (Drs. Rasaiah, Smith, Ferris and Jaffe) who were involved in providing opinions in the Valin case at first instance.

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 71, line 25 to p. 72, line 25
Consultation Report of Dr. Pollanen in Valin, PFP003797, at p. 5
See Section 8.03

53. Similarly, Dr. Pollanen testified that there are no universally recognized pathognomonic signs of asphyxia. He explained that the problem was one created by the lack of specificity of

general or consistent post mortem findings recognized in asphyxial deaths: "… the presence of these [non-specific] findings exist on some spectrum of utility for the diagnosis, and the presence of those findings may be -- may be seen in other conditions which may act as a confounder to the diagnosis of asphyxia". The absence of diagnostic criteria may explain why Dr. Pollanen refers to asphyxial deaths as "among the most enigmatic of all forensic entities that routinely confront the pathologist". Nine of Dr. Smith's cases under consideration at this Commission were diagnosed as asphyxial deaths: Baby M, Baby F, Delaney, Joshua, Katharina, Kenneth, Tamara, Tiffani and Valin.

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 105, lines 18 to 24
Pollanen, "Neck Compression", PFP032700, at p. 1
See Part 7

54. As a final example, Dr. Pollanen concurred with Dr. Feldman, the clinician consulted by the Crown in the Jenna case who stated that "I do not feel that there are very good standards for the evolution of ... inter-abdominal inflammatory changes after trauma in children. Therefore, time estimates based on microscopy are likely to be colored more by an opinion than experimental data."

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 77, line 12 to p. 78, line 17
Report of Dr. Feldman, PFP011159, at p. 5

55. Even in areas where diagnostic criteria apparently exist, this Commission has heard considerable evidence of differences of opinion amongst pathologists. For example, it is widely acknowledged that the issue of whether it is possible to cause fatal head injury by shaking an infant without impact is controversial. While it was generally accepted in the early 1990s that shaking alone could kill, the literature in the area demonstrates conflicting opinions with the passage of time. Three of Dr. Smith's cases under review at this Commission were cases of suspected shaken baby syndrome: Amber, Gaurov and Dustin.

Reference: See Part 9

56. Likewise, the issue of whether a fatal injury can be sustained in a household fall is contentious. While in the early 1990s, the literature generally supported the notion that household falls did not result in fatal injuries to children, the literature in the area again demonstrates conflicting opinions more recently. Four of Dr. Smith's cases under review at this Commission were classified as traumatic head injury: Kasandra, Nicholas, Taylor and Tyrell (five, if Amber is considered to be in the "fall" as opposed to the "shaking" category).

Reference: See Part 9

57. The most significant consequence of the interpretive nature of pediatric pathology is the range of reasonable opinions that can be offered on the same set of facts by qualified practitioners:

> We need to recognize that there is no uniform standard for the level of certainty for expert opinions by different forensic pathologists and that there is often a sliding scale for that standard depending on the issue…The difference in opinion between two experts may be related to different levels of stringency in the cut-off level for the sufficiency of evidence to make an opinion, i.e., reasonable experts both using an evidence-based approach can disagree because one has set the threshold for a diagnosis or opinion at a higher level than the other expert...in the later circumstance, one pathologist might be viewed as "right" and the other pathologist as wrong. However, both pathologists are simply distributed at different points on a spectrum of reasonable variation in expert opinion…the level of certainty used to establish an expert opinion in forensic pathology is variable and is often tacitly linked to the issue under investigation.

Reference: Pollanen, "Systemic Issues", PFP301189, at p. 6

58. Dr. Pollanen noted that while this range of opinion produces a "healthy debate" amongst medical professionals, it is a "huge issue" in the criminal justice system which expects more consensus, if not certainty, from its forensic experts.

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 62, lines 1 to 14

59. Dr. Crane noted that juries can easily be confused by four or five different "nuanced" pathological opinions.

Reference: Evidence of Dr. Crane, 20/11/2007, p. 82, lines 2 to 6

60. The Tamara case provides an excellent example of the potential for confusion. Therein, the Commission has before it four different interpretations of the same key autopsy findings of multiple skeletal fractures of varying ages, aspiration of gastric contents in the lung, an acute tear to the frenulum, hemorrhage in the left sterno-mastoid muscle and an enlarged brain:

(a) Dr. Smith opined that Tamara died from asphyxia with multiple traumatic injuries, that her asphyxia was likely mechanical and was consistent with neck compression or choking;

(b) Dr. Dowling opined that Tamara likely died from mechanical or obstructive asphyxia, which includes smothering, neck compression and chest compression or potentially positional asphyxia;

(c) Dr. Ferris opined that Tamara died from aspiration pneumonia caused by choking on vomit several hours prior to death; and

(d) Dr. Milroy opined that Tamara likely died from upper airway obstruction.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 88
Report of Dr. Dowling, PFP081594, at p. 10-11
Report of Dr. Ferris, PFP081605, at p. 9
Autopsy Report Review Form of Dr. Milroy, PFP012554, at p. 3

61. The differences and similarities between these opinions are nuanced and complex, making them difficult for a trier of fact to reconcile. And, although the opinions of Drs. Milroy, Dowling and Smith are similar, the use of different language to describe the same possible mechanism of death causes additional confusion.

62. Similarly in the Tyrell case, there were two divergent opinions in virtually every area of medical specialty involved in the death investigation, including pathology, neuropathology, pediatrics and surgery.

Reference: See Section 9.08

63. In that case, the range of medical opinions (amongst other factors) resulted in a decision by the Crown to stay the charges against Tyrell's caregiver. The Crown perceived that it was not possible to prove the charges beyond a reasonable doubt in the presence of such divergent opinions amongst medical experts. Most likely, the range of opinions from experts would have simply confused, not assisted, the court.

Reference: See Section 9.08

64. Dr. Cordner observes that little attention has been paid in the literature to the criteria necessary to determine cause of death:

> Deciding the cause of death is a fundamental responsibility for all anatomical pathologists after autopsy. The responsibility is greatest for forensic pathologists, yet very little has been written about the criteria that need to be satisfied to make a decision…

Reference: Dr. Stephen Cordner et al., "Pediatric Forensic Pathology: Limits and Controversies" (Cordner, "Pediatric Forensic Pathology"), PFP301639, at p. 120

65. Dr. Cordner notes that the difficulty facing the criminal justice system is more pronounced when considering the range of opinions that might be offered regarding the manner of death. In a study conducted amongst members of the National Association of Medical Examiners in the United States, twenty-three succinctly described classical forensic pathology situations were presented; eliciting 198 responses from the more than 700 physicians. In "A Model Forensic Pathology Service", Dr. Cordner et al. note that in fewer than half of the cases was there greater than 80% agreement as to the manner of death. The authors aptly conclude: "This points to the existence of reasonable differences of opinion, but also to different understandings, even on the same facts, of the criteria to establish particular manners of death".

> **Reference:** Dr. Stephen Cordner et al., "A Model Forensic Pathology Service" (Cordner, "A Model Forensic Pathology Service"), PFP174486, at pp. 105-106

66. In result, any fair evaluation of Dr. Smith's work must take into consideration the absence of established diagnostic criteria in respect of many forensically relevant issues and the possibility that his findings, opinions and conclusions can be placed on a spectrum amongst reasonable pediatric forensic pathologists practicing in the 1980s and 1990s. The evidence regarding the specific cases (see Parts 7, 8 and 9) demonstrates that this was indeed the case in respect of many of the cases under review.

67. Moreover, any systemic recommendations regarding the practice of pediatric forensic pathology and its inter-relationship with the criminal justice system in Ontario must recognize and, indeed embrace the inevitability of professional differences of opinion.

3.02 PEDIATRIC FORENSIC PATHOLOGY IS AN EVOLVING SCIENCE

68. Exacerbating the uncertainty created by the interpretive nature of forensic pathology is the fact that the state of knowledge is constantly evolving. As stated by Dr. Pollanen, the criminal justice system desires not only certainty, but also "certainty that is immutable over time":

> …the very important concept in pediatric forensic pathology – that knowledge is not frozen, that this knowledge progresses and grows over time. And this produces one of the most defining or important tensions between medicine and law, and that is that the legal system would prefer that answers that are given at some point in the past remain the same. But that is not the nature of knowledge; that is not the nature of medical knowledge. Medical knowledge grows and develops. So, what might be accepted as true and which may form a reasonable basis for expert opinion evidence at some point in the past, may not do so in the present or future circumstance. This produces a fundamental tension between medicine and law, and is very challenging for forensic pathologists.
>
> **Reference:** Evidence of Dr. Pollanen, 12/11/2007, p. 219, line 22 to p. 220, line 13

69. In 2004, The English Court of Appeal in *R. v. Cannings* described the problem for the justice system as follows:

> The trial, and this appeal, have proceeded in a most unusual context. Experts in many fields will acknowledge the possibility that later research may undermine the accepted wisdom of today. 'Never

> say never' is a phrase which we have heard in many different contexts from expert witnesses. That does not normally provide a basis for rejecting the expert evidence, or indeed for conjuring up fanciful doubts about the possible impact of later research. With unexplained infant deaths, however, as this judgment has demonstrated, in many important respects we are still at the frontiers of knowledge. Necessarily, further research is needed, and fortunately, thanks to the dedication of the medical profession, it is continuing.

Reference: *R.* v. *Cannings*, [2004] EWCA Crim 1 (Bailii), at para. 178

70. Dr. Butt noted that not only has the state of knowledge grown, but the diagnostic tools available to pathologists have improved to assist in making good diagnoses.

Reference: Evidence of Dr. Butt, 21/11/2007, p. 73, lines 8 to 12

71. Dr. Pollanen went so far as to acknowledge that the result of the Chief Coroner's Review was "predictable" because "many or at least some of the problematic cases were problematic because of the growth of knowledge issues in forensic pathology". He also admitted that the checklist given to the reviewers did not invite them to consider whether the findings and opinions were reasonable at the time they were given.

Reference: Evidence of Dr. Pollanen, 14/11/2007, p. 91, lines 5 to 12

72. Witnesses testified to specific examples from Dr. Smith's cases where knowledge had grown since the time that Dr. Smith rendered an opinion on the case, including:

(a) With respect to Dr. Smith's confusing the developing cranial suture for a skull fracture in the Joshua case, Dr. Pollanen acknowledged that the development of human cranial sutures is not very well understood, and in particular, there is little information about the histologic stages of suture development, that most of our studies were published in the last 10 years (i.e. after the Joshua case) and that these studies have revealed that at some stages of cranial suture development, the histologic appearance is strikingly similar to a healing skull fracture;

(b) With respect to many of the pathologists, including Dr. Smith, who over-interpreted ano-genital injuries in the Valin case, Dr. Pollanen acknowledged that the single-best peer reviewed study that provides important guidance to pathologists on interpreting post mortem anal appearances in children was published in 1996 (i.e. after the Valin case);

(c) With respect to issues around shaken baby syndrome and whether household falls can cause fatal injury, Drs. Pollanen and Whitwell testified that this area has been the subject of ongoing research and publication and debate has increased considerably in the past decade (i.e. after the Amber, Dustin and Gaurov cases).

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 63, lines 5 to 23 and p. 65, lines 2 to 15
Consultation Report of Dr. Pollanen re: Valin, PFP008802, at p. 12
Evidence of Dr. Pollanen, 06/12/2007, p. 73. lines 1 to 12
Evidence of Dr. Pollanen, 05/12/2007, p. 215, line 16 to p. 216, line 7 and p. 216, line 14 to p. 217, line 10
Evidence of Dr. Whitwell, 13/12/2007, p. 138, line 19 to p. 139, line 10

73. Dr. Milroy attempted to quantify the growth of knowledge and testified that "every five years the number of papers in existence doubles…there are more forensic journals being produced… ."

Reference: Evidence of Dr. Milroy, 20/11/2007, p. 246, lines 2 to 3 and lines 7 to 8

74. Not only has knowledge of specific forensically relevant pathology issues grown since the time Dr. Smith worked on these cases, but also the approach to the determination of cause and manner of death has evolved considerably in these years. Witnesses have confirmed that issues such as the acceptability of "unascertained" as a cause of death, the concept of evidence-based pathology, reliance on psycho-social factors and the use of qualified language to express findings, opinions and conclusions are more recent shifts in the practice.

Reference: See Section 4.03

75. Similarly, the Commission has heard considerable evidence to the effect that the prevailing ethic of pediatric death investigation in Ontario has recently shifted from "think dirty" to "think truth." The former approach mandated pathologists to maintain a high index of suspicion in performing a pediatric autopsy in order to confidently rule out the potential for foul play. This mandate must be understood in light of the concern about undetected child abuse that prevailed at the time the approach was introduced. Furthermore, it must be recognized that any adherence of individual pathologists to this approach flowed from the culture of this period, as opposed to an individual disposition toward suspicion.

76. This Commission has heard that child abuse as a phenomenon only began to garner widespread acknowledgement in the death investigation community during the late 1980s and early 1990s. As put by Dr. Cairns:

> I think the issue of child abuse in the late '80s and early '90s was just starting to become on the horizon. I, certainly, at medical school, had never been taught anything about child abuse, and most of my Canadian colleagues who had graduated in the '70s and very early '80s had no education about child abuse. And this was something that was – was starting to … be accepted as a sad but real issue in … the late '80s, early '90s.
>
> **Reference:** Evidence of Dr. Cairns, 26/11/2007, at p. 52, line 5 to 14

77. While Dr. Cairns' observation may seem surprising given present recognition of child abuse, it is supported by research submitted to this Commission on the manner in which awareness of novel issues becomes incorporated into medical disciplines gradually, and over considerable periods of time. Dr. Cordner writes:

> Many of the types of causes of death in children that are commonly recognized today, including some that are relevant to intentional harm, have only been characterized and accepted in the past 30 to 40 years. For example, the entity of child abuse itself is regarded as being first described in modern times by Caffey in 1946.
>
> …
>
> Apparent lack of priority and urgency in areas of medicine is something that surprises some members of the public when particular issues begin to affect them. To understand this requires an appreciation

> of a further aspect of medical knowledge. Shaken Baby Syndrome, for example, was first recognized in 1974; yet the first Australian summit on the issue was in 2001. While the entity was discussed and debated at meetings of pathologists over the years, the organization of a summit represented a priority hitherto missing. This is an example of knowledge discovered from research and its relatively informal introduction into medical practice generally. In clinical medicine it is generally considered that it takes at least 10 or more years for original research come into routine practice.
>
> **Reference:** Cordner, "Pediatric Forensic Pathology", PFP301639, at pp. 31-32

78. Indeed, Memorandum #631 was created in 1995 because of a concern that investigations into child deaths were not as thorough as they should be throughout the province and in the result, child abuse cases were being missed. This approach was similar to the approach in South Australia which requires all child deaths be treated as a homicide regardless of the probable category. What is clear is that this thinking also continues to evolve.

> **Reference:** Evidence of Dr. Carpenter , 20/12/2007, p. 128, line 20 to p. 129, line 6
> Dr. R. Moles and B. Sangha, "Comparative Experience with Pediatric Pathology and Miscarriage of Justice: South Australia", PFP170167, at p. 9
> Evidence of Dr. Dexter, 17/01/2008, p. 181, lines 21 to 25 and p. 182, lines 1 to 21
> Evidence of Dr. Smith, 28/01/2008, p. 57, line 20 to p. 58, line 4

79. Thus, in addition to recognizing the interpretive nature of forensic pathology, it is equally important to appreciate its evolving nature. Not only is a recognition of the dynamic nature of pathology critical to the consideration of Dr. Smith's work in the 1980s and 1990s, but also it is critical to making effective recommendations as to the future practice of pediatric forensic pathology in Ontario and its inter-relationship with the criminal justice system.

3.03 PEDIATRIC FORENSIC PATHOLOGY HAS LIMITS

80. One should not conclude that pediatric pathology has a challenging relationship with the legal system merely because of its interpretive and dynamic nature. It also suffers from the uncertainty associated with the limits of science. There are, quite simply, forensically relevant issues for which pathology cannot provide a precise or useful answer:

> The overview reports illustrates that there are significant knowledge gaps and basic unanswered questions in forensic pathology that are often linked to important legal questions. In this way, the overview reports are strong imperatives or pleas for the development of effective and well-funded research programs in forensic pathology, focusing on both experimental and interdisciplinary approaches.

Reference: Pollanen, "Systemic Issues", PFP301189, at p. 4

81. Dr. Pollanen refers to many of these unanswered questions as "enigmas" of forensic pathology and offers a list of some sixteen areas of forensic pathology that are challenging.

Reference: Pollanen, "Systemic Issues", PFP301189, at p. 3

82. For example, Dr. Pollanen acknowledges that when it comes to making a determination as to time of death, "there's been very little scientific progress in the area". This challenge is aptly illustrated in the Valin case in which all four pathologists struggled to offer the court any assistance as to when Valin likely died.

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 51, line 25 to p. 52, line 1
Trial Evidence of Dr. Rasaiah, PFP036812, pp. 60-62, pp. 62-67, pp. 67-69, p. 79 and pp. 105-106
Dr. Smith's Trial Evidence, PFP037014, pp. 99-100, pp. 107-109, pp. 115-116
Trial Evidence of Dr. Ferris, PFP037225, pp. 40-42
Trial Evidence of Dr. Jaffe, PFP037014, pp. 164-166

83. Similarly, in his resume, Dr. Pollanen refers to the challenge presented to pathologists when intense lividity develops in "gravitationally dependent" parts of the body, such as in the Valin case. He notes that even with knowledge of the dangers of confusing discoloured livid skin with bruising, it can be difficult to distinguish in the forensically important parts of the body, such as the neck and the head. Dr. Pollanen acknowledges the proposition that "virtually nothing is known about hypostatic hemorrhages, and their existence is even questioned by some pathologists". His own research is the first experimental approach being made to assist in the medico-legally relevant issue of "is it a bruise or not a bruise?"

Reference: Dr. Pollanen's CV, PFP057403, at pp. 23-4
Evidence of Dr. Pollanen, 06/12/2007, p. 55, line 11 to p. 56, line 13

84. Obviously this issue poses a challenge for pathologists. In the Valin case, three pathologists, Drs. Ferris, Rasaiah and Smith, all concluded that Valin had forensically-significant bruising and/or hemorrhaging in the neck and facial area which supported the possibility that Valin died from manual strangulation.

Reference: See Section 8.03(2)

85. Another example of the limits of the science of pathology can be seen in the diagnosis of the post mortem artefact, which remains one of the most baffling areas of uncertainty for pathologists. In his paper, "Pediatric Forensic Pathology: Limits and Controversies", Dr. Cordner notes that "[f]amiliarity with artefacts is part of the essential experience of a forensic pathologist" and yet "[t]here is relatively little written on them in major texts and too little has been done to explore them in research detail". Dr. Cordner notes that even the wary can fall prey to a post mortem artefact.

Reference: Cordner, "Pediatric Forensic Pathology", PFP301639, at p. 61

86. Indeed, Dr. Smith appears to have been faced with the challenge of distinguishing between true injury and post mortem artefact in a number of cases: Joshua, Valin, Nicholas, Taylor and Paolo. He testified that the threshold of diagnosing a post mortem artefact is variable amongst pathologists:

> This is more of the art of pathology than the sciences of pathology. The potential for neck hemorrhage can - - can exist and does exist in – in every autopsy. And depending on the technique which is used, the potential for the severity of that is greater or lesser, in not only the – the actual dissection technique, in terms of the – of the overall autopsy but also the technical ability of the – of the person doing the dissection, the [pathologist] or the autopsy assistant. So each pathologist has to establish for himself or herself a threshold below which, when they see neck hemorrhage, they attributed it - - they attribute it to artifact, and above which, they discount the possibility of artifact. And – but that threshold is dependent on any individual case; on the pathologist, on the techniques, on the situation. And so that's the art; is each of us sets the threshold at whatever level we believe to be appropriate.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 96, line 17 to p. 97, line 11

87. Another challenge in the area of pediatric pathology is the often subtle injuries that could point to a cause of death but also could be the result of regular childhood accidents or resuscitation attempts. The difficulties in determining the causes of certain injuries, such as neck and head bruising, presented difficulties in numerous of these cases including Delaney, Kenneth and Amber.

Reference: See Parts 7 and 9
Cordner, "Pediatric Forensic Pathology", PFP301639, at pp. 179-80 and p. 184

88. According to Dr. Pollanen, the dating of injuries also remains a challenge for forensic pathologists. The primary method by which pathologists age injuries is by histology which is "neither foolproof nor precise". Indeed, Dr. Cordner refers to numerous limitations to histology, including:

(a) Technical limitations: the pathologist is never entirely sure that he has taken the oldest part of the injury in the representative section;

(b) Different tissues heal at different rates, using different processes;

(c) Different individuals heal at different times;

(d) There are constitutional factors such as age and overall health that influence healing; and

(e) The presence of intoxicants, anti-inflammatories and anti-coagulants can influence healing.

Reference: Cordner, "Pediatric Forensic Pathology", PFP301639, at pp. 68-69
Evidence of Dr. Pollanen, 12/11/2007, p. 82, line 5 to p. 83, line 16
Pollanen, "Systemic Issues", PFP301189, at p. 3

89. In his testimony in the Jenna case, Dr. Smith gave a similar explanation of the limits of histology in assisting with the timing of injuries, which was a critical issue in that case.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP074658, at p. 41, lines 11-29

90. As a further example, Dr. Butt refers to the pathological approach to determining whether or not an infant had a separate existence from its mother after birth as a "very coarse science" which is problematic for pathologists examining neo-natal cases. Indeed, this "coarse science" produced different interpretations of the autopsy findings in the Baby M and Baby F cases between Dr. Butt, who opined that there was not sufficient evidence to conclude that either infant was born alive, and Drs. Pollanen, Smith and Chiasson, who opined that the babies were likely born alive.

Reference: Evidence of Dr. Butt, 20/11/2007, p. 93, lines 7 to 8.
Evidence of Dr. Pollanen, 08/12/2007, p. 102, lines 9 to 24
Dr. Smith's Written Evidence, PFP303346, at pp. 46 and 48
Evidence of Dr. Chiasson, 10/12/2007, p. 90, line 21 to p. 91, line 2 and p. 92, lines 1 to 3

91. Dr. Cordner explains the difficulties of determining whether a baby was born alive as follows:

> This is clearly a fundamental question, and it surprises many people to learn that the answer is far from straightforward. . . . The task for the forensic pathologist is to form a view whether the infant was stillborn, or was born alive and died of natural causes, from birth trauma, an accident during or shortly after birth, or from a criminal act.
>
> . . .
>
> "Forensic pathology texts list a variety of anatomic features useful in differentiating live births from still births . . . The entire situation is beset with anatomic ambiguities and pathologic perplexities."

Reference: Cordner, "Pediatric Forensic Pathology", PFP301639, at pp. 111-112 and more generally, at pp. 110-116

92. As quoted by K. Campbell and C. Walker in their paper, "Medical Mistakes and Miscarriages of Justice: Perspectives on the Experience in England and Wales", Professor Paul Roberts noted that scientific expert evidence has limits because "science never tells the whole story". That pathology does not always have answers is troubling for those who must administer the criminal justice system. But it remains the reality for forensic pathologists and it is this reality that must be recognized when assessing Dr. Smith's evidence in the nineteen cases before the Commission. His oft-cited phrase "I

don't know" or "I cannot tell you for certain" should not be viewed as a weakness or a sign of lack of competence, but rather an accurate statement of the limits of the discipline he was practicing.

Reference:
K. Campbell & C. Walker, Medical Mistakes and Miscarriages of Justice: Perspective on the Experience in England and Wales, (Campbell & Walker, "Medical Mistakes and Miscarriage of Justice"), PFP149652, at p. 10
Dr. Smith's Preliminary Hearing Evidence in Katharina, PFP061597, at p. 121, lines 24-5 and p. 132, lines 23-6
Dr. Smith's Preliminary Hearing Evidence in Kenneth, PFP093531, at p. 35, lines 16-19
Dr. Smith's Trial Evidence in Kenneth, PFP063601, at p. 69, lines 18-30, p. 78, lines 5-13 and lines 19-21, p. 95, lines 16-23 and p. 111, lines 24-31
Dr. Smith's Preliminary Hearing Evidence in Tiffani, PFP005543, at p. 19, lines 8-10
Dr. Smith's Preliminary Hearing Evidence in Tamara, PFP071289, at p. 55, lines 12-16 and p. 82, lines 22-26 and PFP012802, at p. 95, lines 15-21
Dr. Smith's Preliminary Hearing Evidence in Joshua, PFP062608, at p. 7, lines 7-11
Dr. Smith's Preliminary Hearing Evidence in Jenna, PFP074658, at p. 39, lines 4-12

93. Moreover, that Dr. Smith occasionally tried to compensate for the gaps in scientific knowledge by deductive reasoning may have been "unscientific" but it was motivated by a desire to assist the Court in circumstances in which the science was lacking.

3.04 PEDIATRIC FORENSIC PATHOLOGY IS MORE DIFFICULT THAN ADULT FORENSIC PATHOLOGY

94. The evidence at this Commission, when considered as a whole, demonstrates that pediatric forensic pathology is a uniquely challenging discipline within which to practice. In particular, the evidence supports the conclusion that pediatric forensic pathology is more complex, time-consuming, controversial and highly-charged than adult forensic pathology.

95. Noting that children are not just "miniature adults" and that illnesses and disease may manifest itself differently in children than in adults, Dr. Chiasson, a certified forensic pathologist,

now practicing primarily in pediatrics, offered his perspective on the difference in the complexity of pediatric cases:

> Well, as Chief Forensic Pathologist…part of my responsibilities involved doing – taking on complex adult cases. And so I've had a fair amount of exposure and – and experience within the adult world with the particularly complicated cases…And…with that sort of background experience, it's my view that the pediatric forensic pathology cases are – are certainly among the – the most challenging cases that one can encounter…virtually anything that is homicide or criminally suspicious in – in the area of pediatrics is – is wrought with all sorts of complexities; whereas, with the adult world, you know -- in fact, most of them cause of death is not an issue…there's forensic issues beyond the cause of the death that can be – cause – cause difference of opinion and gray areas when you're testifying. But that's -- in pediatrics, it's almost inevitable. So the degree of complexity of the cases, not only of the homicide criminally suspicious, even the natural disease cases is quite remarkable.
>
> **Reference:** Evidence of Dr. Chiasson, 10/12/2007, p. 179, line 1 to p. 180, line 11

96. Dr. Taylor, a certified pediatric pathologist, expressed his reluctance to do pediatric forensic work: "I don't like doing them myself; I find them very difficult, very tricky, there's too many – too many variables. And I'm not trained formally in interpretation of many of the injuries that are – that can be encountered in the 5 percent of [criminally suspicious] cases."

> **Reference:** Evidence of Dr. Taylor, 18/12/2007, p. 307, lines 8 to 13

97. Pediatric forensic autopsies are not just complex, they are also often controversial. This is not only a consequence of the complexity of the cases and the interpretive nature of pathology, but also the fact that in a large number of pediatric cases, the importance of the forensic pathology is more central than in a non-pediatric case:

> MS LINDA ROTHSTEIN: So, if the Commissioner were to take away from that, that in a large number of pediatric cases the importance of the forensic pathology evidence is much heightened from a non-ped – from non-pediatric cases, would that be fair?
>
> DR. MICHAEL POLLANEN: Yes. In general, that would be true.
>
> **Reference:** Evidence of Dr. Pollanen, 12/11/2007, p. 221, lines 13 to 19
>
> **See also:** Evidence of Dr. Huyer, 09/01/2008, p. 229, line 6 to p. 232, line 9

98. These controversies often mean that appearing in Court can be much more challenging in the pediatric context than in an adult case:

> With adult cases you go to court – because there's more adult homicides than pediatric homicides, your opportunity to go to court is – is increased. And your opportunity to go to court in cases that aren't – often aren't that controversial. So it's – it's cases – it gives you exposure to the courtroom, maintains your comfort level. So that when you do have to present evidence in a pediatric case where almost now, without exception, there is going to be some contentious issue revolving around the forensic pathology aspects of it.
>
> **Reference:** Evidence of Dr. Chiasson, 10/12/2007, p. 167, lines 12 to 23

99. Exacerbating the complexities and controversies of pediatric cases is the fact that they involve the death of a child. Pressure from the community, the media, the police and the Crown can add significantly to the minefield that these cases present. As B. MacFarlane stated in "Wrongful Convictions: The Effect of Tunnel Vision and Predisposing Circumstances in the Criminal Justice System", "injury and/or death of other human beings often stimulates strong opinions". Obviously, this comment is particularly apt in the context of pediatric deaths.

> **Reference:** B. MacFarlane, "Wrong Convictions": The Effect of Tunnel Vision and Predisposing Circumstances in the Criminal Justice System, (MacFarlane, "Wrongful Convictions"), PFP175326, at p. 62

100. In light of their complexity and controversial nature, Dr. Chiasson testified that the average pediatric case requires 4-5 times more work than the average adult case. Indeed, Dr. Chiasson remarked:

> I am working just as hard doing fifty (50) to sixty (60) autopsies at the … Hospital for Sick Children as I was before, doing two hundred and fifty (250) adult cases.
>
> **Reference:** Evidence of Dr. Chiasson, 11/12/2007, p. 203, lines 21 to 24

101. Indeed, Dr. Chiasson confirmed that in some years the number of medico-legal autopsies being completed by Dr. Smith were "close to a full-time job", not taking account of Dr. Smith's additional responsibilities at the Hospital for Sick Children ("HSC").

> **Reference:** Evidence of Dr. Chiasson, 07/12/2007, p. 138. lines 17 to 18

102. Moreover, regarding compensation for pediatric coronial work, Dr. Chiasson quipped: "It's not quite a volunteer basis, but at this time [in the 1990's] coroner's fees, certainly when you were

looking at these cases, was no way compensating – nobody was doing this for the money. I think they were doing it as a public service."

Reference: Evidence of Dr. Chiasson, 07/12/2007, p. 100, lines 19 to 23

103. Dr. Chiasson noted that Dr. Smith was doing, proportionately, more of these complex, time consuming cases than other pathologists and that comparisons were unfair when considering the controversies in some of the cases: "I don't think it's fair to suggest that what Dr. Smith's doing necessarily … is equivalent to what other pathologists were doing in the province".

Reference: Evidence of Dr. Chiasson, 10/12/2007, p. 245, lines 8 to 11

104. It is to be noted that, although all of the pathologists who participated in the Chief Coroner's Review perform pediatric autopsies, none of them practice exclusively in the pediatric setting. Arguably the framework from which they testified at the Commission is a predominantly adult context which might not adequately appreciate the complexity, the controversy, the public scrutiny and the amount of time required by those practicing in the front lines of pediatric forensic pathology in Ontario on a daily basis.

PART 4 - CULTURE OF PEDIATRIC FORENSIC PATHOLOGY IN ONTARIO

105. A review of the practice of pediatric forensic pathology in Ontario in the 1980s and 1990s must include an in-depth analysis of the culture of the discipline. This culture had five principal features:

(a) An emphasis on training, skills and certification in pediatric pathology, rather than forensic pathology;

(b) A casual relationship with the justice system which had implications for the collection and continuity of evidence, turn-around times, the style of post mortem reports and communication between the pathologist, the police, the Crown and the defence;

(c) An experienced-based approach to rendering opinions in respect of cause and manner of death;

(d) Insufficient diligence in respect of limiting the scope of expert testimony in court; and

(e) An overly adversarial approach to expert testimony.

106. Dr. Smith's work and conduct, and indeed the involvement of all the key players in the pediatric death investigation must be contextualized by the culture within which he and they existed:

> Conformity with general practice, on the other hand, usually dispels a charge of negligence. It tends to show what others in the same 'business' considered sufficient, that the defendant could not have learnt how to avoid the accident by the example of others, that most probably no other practical precautions could have been taken, and that the impact of an adverse judgment (especially in cases involving industry or a profession) will be industry-wide and thus assume the function of a 'test case'. Finally, it underlines the need for caution against passing too cavalierly upon the conduct and decision of experts. [A passage from J.G. Fleming, The Law of Torts, 7ed. (Sydney: Law Book Co., 1987) at 109 approved by Sopinka, J. at 696]
>
> **Reference:** *ter Neuzen v. Korn*, [1995] 3 S.C.R. 674 at 696

4.01 EMPHASIS ON PEDIATRIC, NOT FORENSIC PATHOLOGY

107. Dr. Smith received no formal training in forensic pathology during his medical education, nor was he an accredited forensic pathologist. What he knew about forensic pathology was self-taught through experience doing coroner's cases.

> **Reference:** Dr. Smith's Written Evidence, PFP303346, at pp. 11-12
> Evidence of Dr. Smith, 28/01/2008, p. 28, lines 7 to 13 and p. 29, lines 4 to 13

108. Moreover, Dr. Smith explained that the hole in his training was not apparent to him when he commenced his practice in pediatric pathology at HSC, nor was he aware at any time during the ensuing years that there were relevant gaps in his forensic knowledge and appreciation:

> By the time Dr. Smith commenced his full-time employment at HSC in July 1981, he had minimal exposure to criminally suspicious autopsies and virtually no exposure to trained forensic pathologists. The idea that forensics was a unique discipline requiring specific training had not occurred to him, nor had anyone advised him that if he intended to do forensics work, forensic training would be useful or that he would require additional forensic training.
>
> **Reference:** Dr. Smith's Written Evidence, PFP303346, at pp. 11 - 12
>
> I was following the practice pattern of – of the more senior colleagues in my department, and, so my – my experience was the same as – as theirs. It was the same as – as I understood, of the other pediatric pathologists in Ontario who were doing coroner's cases. I had no knowledge or understanding that there was any value added in forensic pathology. The thought didn't cross my mind, and certainly no one suggested it did.
>
> **Reference:** Evidence of Dr. Smith, 28/01/2008, p. 25, lines 7 to 16
>
> MS JANE LANGFORD: And as your career progress, Dr. Smith, and you became more focussed on pediatric forensic pathology, why did you not pursue any more specific forensic training?
>
> DR. CHARLES SMITH: It never occurred to me that it was of value.
>
> MS JANE LANGFORD: Did anyone suggest to you that you ought to pursue more specific forensic training?
>
> DR. CHARLES SMITH: No.
>
> **Reference:** Evidence of Dr. Smith, 28/01/2008, p. 27, line 22 to p. 28, line 6

109. While it may appear, with the benefit of hindsight, shocking that a pathologist who was practicing in forensic pathology would not have, or appreciate the value of, training in forensic

pathology, the evidence reveals that Dr. Smith was simply a product of the culture in which he trained and practiced:

> In the 1990s in Ontario, the prevailing view was that medicolegal autopsies of infants and children were best performed by a pediatric pathologist. Thus, Dr. Smith (a pediatric pathologist, rather than a forensic pathologist) was appointed director of the unit at its inception….In retrospect, his lack of expertise in forensic pathology was destined to become problematic. But, at the policy level, expertise in pediatric pathology was emphasized over training and qualification in forensic pathology.
>
> **Reference:** Memorandum from Dr. Pollanen to Dr. McLellan, "The Smith review: methods, results and discussion" (Pollanen, "The Smith Review"), PFP032588, at p. 7
>
> My experience in the 1970s and 1980s, which Dr. Pollanen wouldn't have had, would indicate to me that that statement was equally correct then. There was seemingly no recognition that, within pediatric forensic pathology, there was a significant input or value from the -- or to consider cases from the perspective of forensic pathology. The emphasis was on the pediatric side; the pediatric diseases and understanding pediatric disorders that could cause sudden death, for instance.
>
> **Reference:** Evidence of Dr. Smith, 28/01/2008, p. 29, lines 4 to 13

110. Indeed, Dr. Smith's lack of insight into his own knowledge gaps is simply an example of what Dr. Chiasson observed generally when he assumed responsibility as Chief Forensic Pathologist ("CFP") - few senior pathologists working on a fee-for-service basis for the Office of the Chief Coroner ("OCCO") sought his advice, likely because they too did not appreciate the relevance of forensic expertise to their work.

> **Reference:** Evidence of Dr. Chiasson, 07/12/2007, p. 80, line 19 to p. 81, line 17

111. The evidence at the Commission revealed that the vast majority of pathologists involved in pediatric death investigations in the 1980s and 1990s were not formally trained in forensic pathology. Indeed, Drs. Cairns and Chiasson acknowledged that historically there have been virtually no pathologists in Canada who are both "pediatric" and "forensic" in their training. As such, OCCO has typically used pathologists who qualified themselves as forensic pathologists based on "on-the-job" exposure to forensic cases:

> Well it was clear as I've already indicated, that the way the coroner's system was set up when I came onboard, is that there was certainly the theoretical possibility that a pathologist working in a small

> community – or even in a large community, but with very little homicide experience – would be charged with – would have a coroner's warrant directed towards him or her to do a post mortem examination in what was a homicide or criminally suspicious death…[B]ack then there was only the Hamilton unit. There was the Toronto unit. There was the Sick Kids unit, and Ottawa had just come on board. But there's large parts of the province that that wasn't the case. And certainly, in these areas, it was quite possible for a pathologist with virtually – theoretically – no experience in homicide to suddenly be – have a warrant and for whatever reason, sense of duty, or may have been uncomfortable about doing, but in fact, would take on a case that – that was clearly beyond their – their capabilities – forensic capabilities.
>
> **Reference:** Evidence of Dr. Chiasson, 07/12/2007, p. 96, line 3 to p. 97, line 6
>
> [I]n the '80s … it wouldn't have mattered whether it was a straight-forward fall off a ladder, or it was a homicide, or it was a baby. They – most of them were going to, whoever, was the closest pathologist. …
>
> [T]heir forensic aspect would be in Court, Well, I've been doing this work for the last ten (10) years, therefore, I have become an expert in it because of the length of time that I have been doing it, as opposed to I have a specific sub-specialty exam.
>
> **Reference:** Evidence of Dr. Cairns, 29/11/2007, p. 34, lines 1 to 6 and page 36, lines 15-20
>
> **See also**: Evidence of Dr. Carpenter, 20/12/2007, p. 9, lines 8 to 23
> Evidence of Dr. Driver, 09/01/2008, p. 42, line 20 to p. 43, line 21

112. Dr. Cairns noted that throughout 1970s and 1980s, these "self-taught", "on the job" forensic pathologists were simply "accepted as experts in forensic pathology because they had been doing it for a significant length of time." OCCO had no guidelines (and still does not) that addressed the propriety of giving testimony in homicide cases in the absence of formal training and accreditation.

> **Reference:** Evidence of Dr. Cairns, 27/11/2007, p. 165, line 24 to p. 166, line 8

113. Likewise, the agreement between the Ministry and the HSC establishing the Ontario Pediatric Forensic Pathology Unit ("OPFPU") did not include a requirement that any of the pathologists affiliated with OPFPU be formally trained in forensic pathology and, in fact, for most of the 1980s and 1990s, none were.

> **Reference:** Agreement between Ontario and HSC, PFP117722

114. It should be noted that all but four of the pathologists who testified at the Commission were forensically trained and practiced at regional units. Thus, apart from Dr. Smith, Dr. Carpenter,

Dr. de Nanassy and Dr. Dexter, the Commission did not hear from non-forensic pathologists doing coroner's work, nor from any pathologists practicing in community hospitals across the province, to provide a perspective on their forensic work and experience.

115. The formally accredited forensic pathologists who testified at the Commission testified to the dangers of the self-taught approach to forensic pathology:

> DR. MICHAEL POLLANEN: …I don't think it's a stretch to say that if you are self-taught sub-specialist, you have a higher chance of getting into difficulties with misdiagnosis compared to a sub-specialist who is trained and certified…it's not inevitable that every self-taught forensic pathologist is – is going to make mistake.
>
> COMMISSIONER STEPHEN GOUDGE: No, but the risk is heightened?
>
> DR. MICHAEL POLLANEN: Yes, absolutely.
>
> **Reference:** Evidence of Dr. Pollanen, 05/12/2007 - 06/12/2007, p. 44, lines 21 to 25 and p. 46, lines 3 to 8
>
> [F]orensic pathology is now a specialty in its own right. It's not something that you tag on to other disciplines. And I think that we should be look to have…full-time practitioners in forensic pathology and not people who dabble.
>
> **Reference:** Evidence of Dr. Milroy, 22/11/2007, p. 141, lines 3 to 9

116. Pediatric pathologists may have thought that they had sufficient knowledge based upon their pediatric training. However, there are fundamental differences in the educational emphasis of pediatric and forensic pathology and, in hindsight, the failure to recognize the importance of forensic knowledge had a significant impact on the quality of coroner's work in the province.

117. As noted by Dr. Hanzlick in "Options for Modernizing the Ontario Coroner System", pediatric pathology tends to concentrate on natural, congenital, developmental, and genetic disease processes particularly as seen in pediatrics. Forensic pathologists do learn about these natural disease processes but are equally, if not more, focused on unnatural causes of death such as injury and trauma, as well as the evidential requirements of the legal system and the role of an expert witness in communications with the coroner, the police and the trier of fact.

Reference: Dr. Hanzlick, "Options for Modernizing the Ontario Coroner System", PFP174643, at p. 11

118. In short, while the fundamental tenets of pediatric pathology are applicable in forensic cases, the reverse is not necessarily true.:

> The forensic pathologist has to be trained in, and develop an understanding and aptitude for, the legal process of investigation in conjunction with his or her knowledge of the scientific process of investigation. Furthermore, there needs to be an ability to communicate with the legal process. It is no criticism, as it is not relevant to day-to-day clinical practice, *but few medical practitioners have any real understanding of or feel for the legal investigative method. It is a knowledge of the role that legal systems play in society, as well as an understanding of the legal process and legal method, that is one of the features that distinguishes forensic pathologists from their clinical counterparts.* Certainly there are areas of specialist factual knowledge with which forensic pathologists are familiar and their clinical counterparts are not. However, simply acquiring factual knowledge on forensic issues will not provide a clinical pathologist with sufficient skills to undertake forensic work. There are a number of other skills required to supplement the different knowledge set, including (but not limited to) the formulation of opinions, the writing of reports, and presenting testimony in legal settings. [emphasis added]

Reference: Cordner, "A Model Forensic Pathology Service", PFP174486, at pp. 21-22

119. This cultural tendency to value pediatric training over any forensic training was encouraged by an under-developed and under-resourced forensic pathology discipline in Canada:

> Canadian forensic pathology has been neglected for decades… Many of the problems that arise in the overview reports simply reflect the effects of the historically poorly developed state of forensic pathology in Canada and are not unique to Ontario…This has severely hampered the development of Canadian forensic pathology in the following ways:
>
> 1. No academic Departments of Forensic Medicine in any Canadian University;
> 2. No institutes, centres, or research programs in forensic medicine at any Canadian University;
> 3. There are no university-appointed academic forensic pathologists in Canada with supported research programs or endowed research chairs (e.g. no Canada Research Chairs);
> 4. No funded or well-developed domestic post graduate training programs in forensic pathology (notable exceptions are transient fellowships in Calgary, Hamilton, and Toronto);
> 5. The lack of university and academic involvement in forensic pathology has encouraged fee-for-service provision of forensic pathology services rather than institutionally-based career development of forensic pathologists;
> 6. The lack of domestic postgraduate training programs has encouraged the historical rise of "self-taught" and "part-time" forensic pathologist rather than fulltime forensic pathologists;
> 7. The lack of significant continuing medical education programs (the notable exception is the forensic pathology workshop in the Canadian Association of Pathologists' Annual meeting);
> 8. The lack of sufficient numbers of nationally and internationally recognized forensic pathologists that can function as mentors and contribute to the published literature;
> 9. Canadian forensic pathologists need to seek certification in other countries;
> 10. Failure to develop guidelines, standards, and a code of practice for forensic pathology;
> 11. Failure to develop a national response to problems in forensic pathology workloads and

> remuneration. This includes rational solutions to recruiting forensic pathologists from a small workforce of pathologists;
> 12. Failure to develop the subspecialty has increased knowledge gaps relative to other subspecialties in laboratory medicine…
>
> **Reference:** Pollanen, "Systemic Issues", PFP301189, at p. 2

120. In view of this culture, if the formally-trained reviewers had considered 45 homicide cases from the portfolio of any pediatric pathologist practicing in Ontario in the 1980s and 1990s, it would not be a surprising result if they identified numerous discrepancies and disagreements with the approach taken to the case. This is a virtual inevitability in light of the framework from which these pathologists would have approached the case, as distinct from the approach likely taken by the reviewers.

4.02 CASUAL RELATIONSHIP WITH CRIMINAL JUSTICE SYSTEM

121. As stated by Dr. Cordner in "A Model Forensic Pathology Service", forensic pathologists "focus [on] the end point of the forensic investigation, which is a judicial process, usually a criminal court trial, an inquest, or a coroner's finding made without inquest." Conversely, clinical pathologists "focus on providing diagnostically useful advice to a clinician for use in the medical management of a patient". The fact that forensic work in Ontario was being done by those trained in clinical pathology is likely the root cause to what can only be described as an overly casual relationship with the criminal justice system which manifested itself in several critical failings in the coronial system.

Reference: Cordner, "A Model Forensic Pathology Service", PFP174486, at p. 20

4.02(1) Collection and Continuity of Evidence

122. With few pathologists in Canada formally trained in forensic medicine and virtually no accredited pediatric forensic pathologists, most of the pathologists and coroners involved in the coronial system had insufficient understanding of the evidentiary requirements of the legal system.

Arguably, this resulted in incomplete death investigations, inadequately documented death investigations and insufficiently rigorous handling of evidence. Some examples are discussed below.

4.02(1)(a) Insufficient Pre-Autopsy Investigations and Communications

123. It is undisputed today that the attendance at a death scene is critical when the apparent manner of death is homicide or suicide. There are critical observations, particularly in respect of cause and manner of death that can only be made at the scene, including signs of rigor mortis, livor mortis, visible external injuries and the location and position of the body.

Reference: Evidence of Dr. McLellan, 14/11/2007, p. 178, lines 2 to 8 and p. 178, line 19 to p. 179, line 19
Office of the Chief Coroner, Guidelines for Death Investigation, 2nd ed. (April 12, 2007), PFP032495, at p. 8
Evidence of Dr. Edwards, 07/01/2008, p. 55, lines 15 to 19

124. Moreover, there is often critical information that can be obtained from family members or those caring for the deceased.

Reference: Evidence of Dr. McLellan, 14/11/2007, p. 178, lines 2 to 8 and p. 178, line 19 to p. 179, line 19
Investigation Questionnaire for Sudden Unexpected Deaths in Children under the Age of Five (5), PFP032477

125. However, the evidence at the Commission was that pathologists rarely attended the scene of death in the 1990s to collect information and evidence and attendance by Coroners was inconsistent across the province:

> The classical approach to the forensic pathology of homicide includes the pathologist visiting the scene. This has not been a universal and customary practice for most pathologists in Ontario.
>
> **Reference:** Pollanen, "Systemic Issues", PFP301189, at p. 10
>
> MS LINDA ROTHSTEIN: [H]ow often [was it] in the late '90s, early 2000, for pathologists to actually attend the scene?
>
> DR. MICHAEL POLLANEN: Rare

Reference: Evidence of Dr. Pollanen, 12/11/2007, p. 130, lines 19 to 24

MR. NIELS ORTVED: [I]deally if – if you were still the Chief Coroner of Ontario, you'd like to have a coroner at every scene of a criminally suspicious death?

DR. BARRY MCLELLAN: Yes

MR. NIELS ORTVED: And…that certainly wasn't happening invariably in the late '90s?

DR. BARRY MCLELLAN: Correct

Reference: Evidence of Dr. McLellan, 14/11/2007, p. 178, lines 2 to 13

126. Dr. Smith testified that he attended the scene on only a few occasions during his 24-year practice and only when specifically requested to do so by the police. He noted that he had no training as to what to do at a scene.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 24

127. Dr. Dexter, Director of the Kingston Forensic Pathology Unit, testified that he attended the scene only three times in 30 years of practice.

Reference: Evidence of Dr. Dexter, 17/01/2008, p. 103, lines 11 to 15

128. Dr. Shkrum, Director of the London Forensic Pathology Unit, described his scene attendance as "rare" in the past fifteen to twenty years.

Reference: Evidence of Dr. Shkrum, 17/01/2008, p. 106, lines 17 to 23

129. Inevitably, this failure to appreciate the forensic value of a scene investigation was a lost opportunity to obtain critical circumstantial evidence that might assist the pathologist in reaching a conclusion as to cause of death and the coroner in respect of manner of death. It likely impacted on the decisions made by the police and the Crown in respect of criminal proceedings.

130. For example, Dr. Milroy testified that a scene investigation by a pathologist in the Sharon case might have assisted in the analysis of the cause of death. Specifically, he noted that examining

the position of the body, the pattern and distribution of blood and the potential of examining possible weapons at the home initially would have been useful to Dr. Smith in that case.

Reference: Evidence of Dr. Milroy, 22/11/2007, p. 242, line 22 to p. 243, line 19

131. Similarly, in the Valin case, there is little doubt that the confusion regarding the time of death and the position the child was found might have been reduced if the Coroner had more diligently investigated and documented the scene. There appears to be a discrepancy between the Coroner's Warrant for Post Mortem Examination, which suggests that the child was discovered "sitting cross legged and slumped forward" and the Coroner's Investigation Statement which stated that she was found in bed "lying prone, in the knee-chest position". It is reasonable to assume that had Drs. Ferris, Rasaiah and Smith actually viewed the death scene, they might have been less likely to mistake the post mortem lividity for forensically significant bruising and haemorrhaging.

Reference: Warrant for Post Mortem Examination, PFP003842
Coroner's Investigation Statement, PFP003664

132. Additionally, Professor Knight noted that the Coroner in the Valin case failed to take the room temperature which frustrated the determination of time of death:

> …the defects in attempting to determine the time of death began with the coroner, Dr. Crookston, who made the elementary error of failing to measure the ambient temperature at the scene of death, thus frustrating any hope of scientifically assessing the time of death from body temperature. I would also note that he used a spring-operated dairy thermometer to take the child's rectal temperature, which is inevitably less accurate than the mercury or thermocouple devices always used (certainly in Europe) at scenes of death. However, any inaccuracies introduced by this instrument are outweighed by the failure to take the temperature of the environment near the body.

Reference: Letter from Dr. Knight to Mr. D. Bayliss, PFP003900, at p. 3

133. Likewise, in the Jenna case, the Coroner did attend the hospital where Jenna was pronounced dead but failed to pass on critical information to Dr. Smith (*via* the warrant or orally) regarding the suspicions of sexual assault on the part of clinicians at the Peterborough Civic Hospital and the

discovery of a hair in Jenna's pubic region despite being aware of it. Nor did he ensure that the complete medial chart was given to Dr. Smith.

Reference: PC Rudback's Notes, PFP072916, at p. 3
Dr. Smith's Written Evidence, PFP303346, at p. 56

134. In more than half of the cases under review, the child was taken to the hospital in an attempt at resuscitation (with varying degrees of success). In the Tyrell, Gaurov, Amber, Tiffani, Taylor, Paolo, Kasandra, Dustin, Jenna and Kenneth cases, it is not known whether the Investigating Coroner attended at the home of these children, where they were prior to hospitalization.

Reference: Evaluation of Coroner's Investigation: Tyrell, PFP137452, at p. 1
Evaluation of Coroner's Investigation: Gaurov, PFP137430, at p. 2
Evaluation of Coroner's Investigation: Amber, PFP137432, at p. 2
Evaluation of Coroner's Investigation: Tiffani, PFP137472, at p. 1
Evaluation of Coroner's Investigation: Taylor, PFP137434, at p. 1
Evaluation of Coroner's Investigation: Paolo, PFP137476, at p. 2
Evaluation of Coroner's Investigation: Kasandra, PFP137478, at p. 2
Evaluation of Coroner's Investigation: Dustin, PFP137500, at p. 1
Evaluation of Coroner's Investigation: Jenna, PFP137506, at p. 1
Evaluation of Coroner's Investigation: Kenneth, PFP137512, at p. 1

135. It remains unclear as to how Dr. Smith's findings and opinions might have been affected by the information available from these scenes of death.

4.02(1)(b) No Protection from Tampering of Bodies after Death

136. Dr. Smith gave evidence that HSC did not have a good system in place to provide continuity of evidence as it related to the handling of the body. Upon arrival at HSC, the body was placed in the morgue by the body removal service or the funeral home. This was not witnessed by HSC staff.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 24

137. The bodies were not stored in individual lockers.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 24

138. Moreover, there was initially no way of tracking who went into or out of the morgue. Although a sign-in system was instituted in the mid-1980s, there was no particular system to ensure compliance.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 24

139. This raises the spectre of evidence tampering and the potential introduction of contaminants and reflected the general lack of understanding of the importance of continuity of evidence in the criminal justice system.

4.02(1)(c) Role of Pathology Assistant

140. The forensic experts who testified at the Commission noted the importance of the pathologist himself undertaking the dissections and organ removal. This not only is an issue of quality control, but also negates the necessity of a pathology assistant having to testify regarding dissection techniques and other autopsy observations.

141. All of Drs. Butt, Milroy and Crane indicated that in criminally suspicious cases, it is critical for the pathologist to perform the autopsy.

Reference: Evidence of Dr. Milroy, 22/11/2007, p. 234, lines 4 to 25
Evidence of Dr. Butt, 22/11/2007, p. 236, lines 12 to 22
Evidence of Dr. Crane, 22/11/2007, p. 235, lines 3 to 20

142. In Ontario in the 1980s and 1990s, it was quite standard for the autopsy assistant or pathology assistant to be critically involved in the examination, taking body measurements, organizing x-rays and, significantly, performing tissue dissections, even in criminally suspicious or homicide cases.

Reference: Evidence of Dr. Chiasson, 07/12/2007, p. 116, lines 7 to 19
Evidence of Dr. Perrin, 17/12/2007, p. 179, line 11 to p. 180, line 2

143. While the evidence demonstrates that the pathology assistants at both HSC and OCCO are/were superb technicians with vast experience, their active participation in the critical procedures that form the basis of the opinion as to cause and manner of death in pediatric cases raises questions about the necessity of their participation in subsequent legal proceedings.

144. Parenthetically, Dr. Smith tended to delegate somewhat less to his pathology assistants than did the typical pathologist. Dr. Perrin testified that this was a reflection of Dr. Smith's considerable skills as a prosector.

> **Reference:** Dr. Smith's Written Evidence, PFP303346, at p. 26
> Evidence of Dr. Perrin, 17/12/2007, p. 180, lines 6 to 20

4.02(1)(d) No Systems for Slides, Photographs and Other Evidence

145. Dr. Pollanen testified about the critical importance of the evidence obtained at the autopsy and the necessity of implementing policies and procedures to ensure that the evidence is retained and easily accessible for use in subsequent criminal proceedings:

> Physical evidence is now, more than ever before, critical to the criminal justice system. This is due to the growth of the forensic sciences such as DNA technology. Therefore, the autopsy represents a critical step in the collection of evidence in a criminal investigation. However, to gain the benefits of physical evidence collected it is essential to ensure that the physical evidence is detected, documented, collected, transferred, stored, disclosed, tested, and archived. It is a major systemic issue to strengthen procedures at all steps in the chain of custody.
>
> **Reference:** Pollanen, "Systemic Issues", PFP301189, at p. 9

146. The Commission has heard evidence of problems of custody and control of key autopsy evidence including: tissue slides, photographs and specimens.

> **Reference:** See Parts 7 to 9, below: Joshua, Sharon, Jenna, Dustin, Valin
> Pollanen, "Systemic Issues", PFP301189, at p. 9

147. It would be easy to simply attribute these problems to Dr. Smith's acknowledged disorganization and untidiness. However, this is an oversimplification of a much wider systemic

problem. In truth, there were virtually no universal written policies and procedures for pathologists related to the chain of custody of evidence.

148. A review of post mortem reports also demonstrate that typically, pathologists had varying practices and did not always record therein the photographs, histological sections, x-rays or samples taken from the examination.

Reference: Post Mortem Report of Dr. Rasaiah in Valin, PFP003199
Autopsy Final Report of Dr. Chen in Nicholas, PFP007644
Post Mortem Report of Dr. Chen in Paolo, PFP002623
Post Mortem Report of Dr. Nag in Dustin, PFP001982
Post Mortem Report of Dr. Rieckenberg in Taylor, PFP009623
Post Mortem Report of Dr. Walsh in Baby F, PFP009867
Post Mortem Report of Dr. Cassidy in Tiffani, PFP005533

149. All of Drs. Shkrum, Rao and Dexter gave different answers as to the system they each employ in terms of tracking evidence taken from the autopsy. All have developed their own practices in the absence of a protocol published by OCCO.

Reference: Evidence of Dr. Rao, 17/01/2008, p. 132, line 20 to p. 134, line 8
Evidence of Dr. Shkrum, 17/01/2008, p. 134, line 15 to p. 135, line 10
Evidence of Dr. Dexter, 17/01/2008, p. 135, line 13 to p. 136, line 6
HRFPU – Record of Autopsy/Exhibits in Violent Deaths Where Criminal Charges May be Laid, PFP157648

150. Moreover, the justice system apparently was content to allow the pathologist to be the custodian of physical exhibits and other autopsy material after the post mortem examination, and indeed, after the case was completed.

151. Drs. Taylor and Cutz both testified that when handling materials of potential relevance to a criminal case, they would keep them in a locked area of their own offices; their testimony demonstrates that this practice was based on their own judgment, as opposed to institutional direction from HSC or OCCO.

Reference: Evidence of Drs. Taylor and Cutz, 18/12/2007, p. 170, line 5 to p. 173, line 3

152. As seen in the Valin case, when AIDWYC initially approached the Crown to request assistance in locating the relevant material for its review of the case, no one appears to have known who had the material. Mr. Downes, from the Crown Law Office, contacted Mr. Wasyliniuk, the trial Crown requesting assistance in locating the requested materials:

> As you can see from Mr. Lockyer's letter, he is requesting at this stage some police notes and some material from the autopsy performed on [Valin]. While I have retrieved all of the materials relating to the appeals, the *kind of material requested by Mr. Lockyer is, I presume, still in the possession of the police and the Northern Regional Forensic Laboratory*…I would greatly appreciate your assistance in locating the requested materials. [emphasis added]

Reference: Letter from Mr. P. Downes to Mr. G. Wasyliniuk, PFP059542, at pp. 1-2

153. It appears that Mr. Wasyliniuk delegated the task of locating the material to the Thunder Bay police who in turn contacted Dr. Rasaiah. Ultimately, the slides were located at HSC. However, query whether they would ever have been located if Dr. Rasaiah had not himself kept diligent record as to where the slides were sent and when they returned (or not). In any event, there is no doubt that they would have been more quickly located had the Crown retained custody of the materials after trial.

Reference: Letter from Dr. Rasaiah to Staff Sgt. Carlucci, PFP059530

154. There also appears to have been no system to collect handwritten notes and other material from the autopsy for disclosure to the defence. The materials were considered the personal possessions of the pathologist who performed the examination.

Reference: Evidence of Dr. Chiasson, 11/12/2007, p. 124, line 13 to p. 126, line 26
Evidence of Dr. Shkrum, 18/01/2008, p. 58, lines 1 to 6

155. In recognition of the system-wide failures regarding the safekeeping of evidence, Dr. Pollanen recommended that systems be adopted to improve the chain of custody:

> Pathologists and the institutions that employ pathologists should not be custodians of physical exhibits for the criminal justice system unless the specimens are medical (tissues, bones, some body fluids). This implies that storage and archiving of physical exhibits such as swabs, smears, and trace evidence should be the responsibility of other agencies…Procedures for the collection of [medical] evidence should be developed to minimize cross contamination and emphasize evidence collection at the scene rather than the autopsy room…Archiving of fixed tissues, blocks, and slides should be controlled to ensure future retrieval for review.

Reference: Pollanen, "Systemic Issues", PFP301189, at p. 10

156. In any event, relying on the organizational skills of the pathologist who performs the autopsy appears to be an unduly relaxed approach to potentially critical evidence. There is little doubt that had a more formal system been in place, Dr. Smith would not have had the challenges he did in maintaining custody and control of relevant evidence.

4.02(2) Consultations not Documented

157. Another illustration of the casual approach to evidentiary requirements is the apparent practice of "corridor-consultations" that were not documented and/or attributed by the pathologists in post mortem reports.

158. Dr. Smith testified that informal consultations between pathologists and clinicians occurred frequently. For example, Dr. Smith would often call intensivists, who had treated a deceased, to attend the autopsy, view the findings and discuss the case. Dr. Smith would often obtain assistance in the diagnostic process from these interactions. Likewise, Dr. Smith recalls that the cardiologists often wanted to be consulted in cases of congenital heart disease and their assistance in evaluating the heart and lungs was invaluable at autopsy. In cases of suspected abuse, Dr. Smith would often review films with a radiologist or call a member of the SCAN team to attend or discuss findings.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 27-28

159. Dr. Smith advised that he did not have a fixed practice of recording the involvement of another physician in these consultations although he sometimes documented the attendance in his

handwritten notes. The findings of these consultants would often be incorporated without reference in his post mortem report.

Reference: *Ibid*, at p. 28

160. Dr. Smith's practice appeared to reflect the fact that while medical practitioners are happy to be of assistance to colleagues, many have no interest in being involved in criminal proceedings. Many were more than willing to consult as long as they were not requested to do a report and were not mentioned by the pathologist.

161. Dr. Nag, the pathologist who conducted the original autopsy in the Dustin case testified at the preliminary hearing that prior to submitting her report, she was provided with an opinion by pediatric pathologist Dr. Allan Fletcher on the lung findings. Dr. Nag indicated that Dr. Fletcher had looked at the sections but did not provide a report as she and Dr. Fletcher "just have this collegial sort of arrangement".

Reference: Preliminary Hearing Evidence of Dr. Nag, PFP048045, at p. 108

162. Further, on cross examination, Dr. Nag admitted that she had spoken with at least five doctors prior to certifying the cause of death. When asked their names, she initially responded by saying that she did not know if it would be appropriate because "they weren't really consults, they didn't provide written report and, you know, unless they do that, then people aren't willing to stand by what they say."

Reference: Preliminary Hearing Evidence of Dr. Nag, PFP048045, at pp. 111-113

163. Dr. Chiasson acknowledged in his testimony that the fear of having to testify in court was an impediment to finding a consultant who would be willing to give a written opinion in homicide or criminally suspicious deaths.

Reference: Evidence of Dr. Chiasson, 11/12/2007, p. 48, line 18 to p. 49, line 9

164. Dr. Chiasson also acknowledged that while he was CFP this remained an ongoing concern, even after OCCO issued a directive that these "corridor consultations" should be documented and a report issued by a consultant if their opinion was important to determining the cause of death.

Reference: Evidence of Dr. Chiasson, 11/12/2007, p. 50, lines 17 to 23
Memorandum #99-02, "Forensic Pathology Pitfalls", PFP032320, at p. 3
Memorandum #01-06, "Written Consultation Reports", PFP032332

165. Similarly, Dr. Young acknowledged that the practice of incorporating the findings of a consultant without reference was not confined to Dr. Smith and that, in his view, the phenomena related to reluctance by some to give formal opinions.

Reference: Evidence of Dr. Young, 03/12/2007, p. 167, line 1 to p. 168, line 1

166. Dr. Young also acknowledged that OCCO had no system for tracking consultations.

Reference: Evidence of Dr. Young, 03/12/2007, p. 79, lines 13 to 24

167. Again, while Dr. Smith has been harshly criticised for failing to adequately document and attribute his consultations and record the findings, opinions and conclusions of the specialist whom he consulted, this is more fairly described as a widespread practice than a failing on the part of Dr. Smith.

4.02(3) Turn-around Times

168. Significant attention has been focused on Dr. Smith's apparent difficulties in producing post mortem reports in a timely fashion. He has acknowledged his weakness in this area and admitted that the problem is largely attributable to his disorganization and inability to balance competing expectations for his time.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 62, line 13 to p. 63, line 12
Dr. Smith's Written Evidence, PFP303346, at p. 19

169. In fairness, problems of timelines in the completion of post mortem reports are system-wide and continue into the present day. Dr. Chiasson stated that it was "still a struggle" to manage these problems. Without seeking to diminish the significance of Dr. Smith's personal shortcomings with respect to timeliness, it must be recognized that they were not the sole contributing factor to this problem. For example, time consumed by important ancillary testing, such as toxicology, considerably augmented instances of delay.

Reference: Evidence of Dr. Chiasson, 11/12/2007, p. 217, line 8 to p. 218, line 4

170. Dr. Lucas confirmed that delays in the completion of post mortem reports is a system-wide problem that was never confined to Dr. Smith, and that continues into the present day:

> MR. ROBERT CENTA: Okay. And was [delay] a problem unique to Dr. Smith?
>
> DR. WILLIAM LUCAS: Unfortunately, no. It's – it's a problem that we encounter with a number of our pathologists, both our forensic pathologists that are our staff, salaried people, as well as physicians in – or pathologists in the communities that are doing autopsies for us.
>
> And I think there's a variety of reasons that explain why we have those delays, but it's – it's problematic.
>
> MR. ROBERT CENTA: And those delays continue today?
>
> DR. WILLIAM LUCAS: They do, unfortunately, yes.

Reference: Evidence of Dr. William Lucas, 07/01/2008, p. 125, line 16 to p. 126, line 5

171. Dr. McLellan acknowledged that there are many circumstances in which it has taken many months longer than 90 days (3 months) for a post mortem report to be produced.

Reference: Evidence of Dr. McLellan, 12/11/2007, p. 165, lines 5 to 18

172. Inspector Keetch confirmed that the eight-month wait for Dr. Chen's post mortem report in the Nicholas case was not unusual.

Reference: Evidence of Insp. Keetch, 14/01/2008, p. 54, line 11 to p. 55, line 15

173. Likewise, Mr. Justice MacMahon confirmed that Dr. Smith was not the only pathologist who struggled with the timeliness of his reports.

Reference: Evidence of Mr. Justice MacMahon, 06/02/2008, p. 14, lines 2 to 6

174. All of Drs. Pollanen, Rao, Dexter, Shkrum and Huyer acknowledged challenges with backlogs and offered a variety of explanations including:

(a) delays in the receipt of toxicology reports from the Centre of Forensic Sciences;

(b) delays in the receipt of histology slides from the hospital laboratory;

(c) priority being granted to living rather than deceased pathology;

(d) heavy workloads; and

(e) insufficient resources (pathologists and consultants).

Reference: Evidence of Dr. McLellan, 12/11/2007, p. 164, lines 5 to 18
Evidence of Dr. Rao, 18/01/2008, p. 14, line 14 to p. 17, line 10 and p. 19, line 8 to p. 21, line 1
Evidence of Dr. Pollanen, 06/12/2008, p. 230, lines 14 to 17
Evidence of Dr. Dexter, 17/01/2008, p. 17, lines 11 to 23 and p. 19, lines 4 to 17
Evidence of Dr. Shkrum, 18/01/2008, p. 17, line 25 to p. 19, line 3
Evidence of Dr. Huyer, 10/01/2008, p. 271, line 15 to p. 218, line 5
Evidence of Dr. Pollanen, 12/11/2007, p. 164, line 19 to p. 165, line 18

175. One other obvious explanation for the problem of delayed reports is the virtual absence of a systemic and central mechanism to track uncompleted autopsy reports, which Dr. Pollanen notes is critical if the pathology profession is going to respond to needs of the criminal justice system. Indeed, there is currently no way for OCCO to know all cases being investigated by coroners in the province.

Reference: Evidence of Dr. Lucas, 07/01/2008, p. 43, line 21 to p. 45, line 9
Evidence of Dr. Cairns, 27/11/2007, p. 22, lines 16 to 22
Pollanen, "Systemic Issues", PFP301189, at p. 11

176. In light of the evidence, Dr. Smith's 7-month turnaround time for the post mortem report in the Athena case which Justice Trafford described as a "significant" delay does not appear to have been far off the standard turnaround time in the profession at the time. It should be noted that Dr. Smith did not obtain the toxicology results until 6 months after the post-mortem examination was completed in that case. He completed his post mortem report within 6 weeks thereafter.

Reference: *R. v. Kporwodu*, PFP034420, at pp. 11-13

177. At worst, Dr. Chiasson admitted that it was not that Dr. Smith was producing his reports more slowly than others; it was just that he did not respond quickly enough when users complained:

> COMMISSIONER STEPHEN GOUDGE: I guess what I'm getting after, Dr. Chiasson, is that throughout the period of the '90s, there was obviously considerable concern in OCCO about Dr. Smith's turnaround times…how do you compare the turnaround time today with the turnaround times that raised the concerns in the mid '90s?
>
> …
>
> DR. CHIASSON: Well, I – you know, in reality, I don't [think] they're all that much different, but…the point I would make and I refer to my own approach about the squeaky wheel…I've not only done cases at Sick Kids, I've been doing that at OCCO, and I'm -- I'm juggling a fair -- fairly heavy caseload. My approach has always been to -- if somebody is looking for a report to -- to produce that report; that goes to the top of the pile and to – to respond to that request. Many of the autopsies that are performed, OCCO is – is obviously keen to get the reports, but they're particularly keen if somebody else is looking for them
>
> COMMISSIONER STEPHEN GOUDGE: So, the measure in the mid '90s might not have been so much the average turnaround [time] as the failure to meet the complaints from users of the reports?
>
> DR. CHIASSON: That's right.

Reference: Evidence of Dr. Chiasson, 11/12/2007, p. 220, line 5 to p. 221, line 3 and p. 221, line 23 to p. 222, line 2

4.02(4) Style and Format of Post Mortem Reports

178. The external reviewers in the Chief Coroner's Review harshly criticized Dr. Smith for the style and content of his post mortem reports in all nineteen cases under review at the Commission. Specifically, he was criticized for failing to sufficiently document the circumstantial information, medical history or other information obtained from the police, failing to provide a narrative explanation for his conclusion on cause of death and failing to provide analysis of a variety of

forensically relevant issues such as timing of injuries, whether the infant had separate existence and the etiology of particular external wounds.

Reference: Medico-Legal Report of Prof. Saukko re Delaney, PFP135429, at pp. 5 and 9
Medico-Legal Report of Prof. Saukko re Kenneth, PFP135439, at pp. 5 and 6
Medico-Legal Report of Dr. Milroy re Sharon, PFP135449, at p. 5
Medico-Legal Report of Dr. Milroy re Tamara, PFP135457, at pp. 4 and 8
Medico-Legal Report of Dr. Milroy re Jenna, PFP135465, at pp. 4-5 and 8
Medico-Legal Report of Dr. Milroy re Tiffani, PFP152220, at p. 7
Medico-Legal Report of Dr. Butt re Katharina, PFP135508, at pp. 3-4
Medico-Legal Report of Dr. Crane re Joshua, PFP135527, at p. 3
Medico-Legal Report of Dr. Crane re Tyrell, PFP135538, at pp. 3 and 5
Medico-Legal Report of Dr. Whitwell re Amber, PFP300000, at pp. 5, 6 and 9
Medico-Legal Report of Dr. Whitwell re Dustin, PFP136005, at pp. 4-5 and 7-8
Medico-Legal Report of Dr. Whitwell re Gaurov, PFP136013, at pp. 4-5 and 6-7
Medico-Legal Report of Dr. Whitwell re Kasandra, PFP136020 at pp. 5-6 and 10
Medico-Legal Report of Dr. Whitwell re Taylor, PFP136030 at p. 10

179. In fact, the evidence demonstrates that Dr. Smith's reports were entirely within the mainstream of Ontario pathologists in the 1980s and 1990s and, arguably, up until recent times.

180. During cross examination, Dr. Butt acknowledged that Dr. Smith's post mortem reports were consistent with what he characterized as the succinct, non-descriptive, non-analytical post mortem reports typically produced by pathologists in Ontario in the 1990s.

Reference: Evidence of Dr. Butt, 21/11/2007, p. 160, line 20 to p. 161, line 17

181. The Commission has numerous examples of post mortem reports authored by pathologists other than Dr. Smith to corroborate this evidence.

Reference: Post Mortem Report of Dr. Rasaiah in Valin, PFP003199
Autopsy Final Report of Dr. Chen in Nicholas, PFP007644
Post Mortem Report of Dr. Chen in Paolo, PFP002623
Post Mortem Report of Dr. Nag in Dustin, PFP001982
Post Mortem Report of Dr. Rieckenberg in Taylor, PFP009623

Post Mortem Report of Dr. Walsh in Baby F, PFP009867
Post Mortem Report of Dr. Cassidy in Tiffani, PFP005533

182. Additionally, Dr. Chiasson, who as CFP reviewed many of Dr. Smith's reports in criminally suspicious cases, acknowledged that he saw nothing in Dr. Smith's reports that caused him any major concern at the time. Presumably, if Dr. Chiasson had had the same concerns about the absence of history, opinion and/or analysis, or about Dr. Smith's choice of words to describe his key findings and conclusion with respect to cause of death that the reviewers appear to have had, he would have considered these to constitute "major concerns".

Reference: Evidence of Dr. Chiasson, 10/12/2007, p. 221, lines 10 to 19

183. Notwithstanding the fact that Dr. Smith's reports were within the standard expected of a pathologist in the 1980s and 1990s, the comments of the reviewers bear consideration because the style of post mortem report had various common features, discussed below, which may have influenced many of the problematic issues raised in the nineteen cases. At minimum, it certainly disabled the reviewers from properly appreciating Dr. Smith's bases for his findings, opinions and conclusions.

4.02(4)(a) No History or Circumstantial Evidence

184. It appears that few pathologists included in their post mortem reports any history or circumstantial evidence obtained from the coroner or police in the course of the investigation:

> MR. MARK SANDLER: …in the context of the report that made its way to the coroner or to the parties in the administration of criminal justice, was it conventional practice for many or all of the forensic pathologists, at that point in time, not to include a history in that kind of report?
>
> DR. MICHAEL POLLANEN: It typically would – would not include the history.
>
> **Reference:** Evidence of Dr. Pollanen, 05/12/2007, p. 178, line 20 to p. 179, line 2
>
> Well, the rationale for not putting the history in the coroner's report?...And again, Dr. Smith wasn't the only one (1) that would not include a history in his report of post-mortem examination. There are some that though, well, the information would somehow bias – bias the reader…The information wasn't really necessary. I mean, the pathologist was there to provide pathologic diagnosis. We're in the coroner's system. It's the coroner's job to sort out the history, which they provide – they would

> have and – and, you know, render their ultimate determinations of cause and manner of death…and there was nothing in the form.

Reference: Evidence of Dr. Chiasson, 07/12/2007, p. 157, lines 2 to 23

185. Dr. Chiasson testified that he did not want to include historical information in his reports because he might be seen to have adopted or endorsed the circumstantial facts:

> I mean -- the police may have some thoughts and, you know, if I happen to agree with the thoughts…the perception could be that, well, you know, I'm being influenced – unduly influenced.

Reference: Evidence of Dr. Chiasson, 11/12/2007, p. 148, lines 20 to 24

186. In any event, Dr. Chiasson confirmed that in the 1980s and 1990s, there were no guidelines or protocols in place regarding how much information of a circumstantial or historic nature should be included in a post mortem report.

Reference: Evidence of Dr. Chiasson, 11/12/2007, p. 142, lines 6 to 23

187. The omission of history in post mortem reports is, no doubt, concerning for the administration of justice given that pathologists routinely receive forensically relevant information from the police prior to conducting the autopsy and it appears that pathologists have varied practices as to what information received from the police or Coroner they record in their handwritten notes.

188. Dr. Chiasson testified that he recently changed his practice. Previously, he would listen to the police and not make very many notes. Today, he takes some notes, although admittedly not detailed.

Reference: Evidence of Dr. Chiasson, 10/12/2007, p. 254, line 18 to p. 255, line 10

189. Dr. Crane writes down everything he is told by a police officer so that there is a written record for everyone to see.

Reference: Evidence of Dr. Crane, 21/11/2007, p. 119, lines 8 to 18

190. Dr. Shkrum take notes of his conversations with the police prior to the autopsy, admittedly writing down a lot of information which may not be relevant to the purpose of the autopsy.

Reference: Evidence of Dr. Shkrum, 18/01/2008, p. 58, line 23 to p. 59, line 6

191. As such, although Dr. Smith is criticized for failing to formally record historical information in his post mortem reports, it appears he was well within the standard of practice at the time not to do so.

4.02(4)(b) Opinion on Cause of Death Only

192. It is undisputed that, until quite recently, most pathologists only rendered a written opinion in the post mortem report on cause of death and that opinion would be offered succinctly, without explanation:

> Well, this Province historically is actually quite typical of North America in – in general and that is that there is -- probably the most common approach to reporting medicolegal autopsies, is not to have any opinions in – in the reports…just a diagnosis and a cause of death. So for example, in most medical examiner jurisdictions, there would be no fulsome discussion of opinion. Now there are exceptions to that, but – but generally speaking, that's what was – that is a common practice currently today in North America..I think it was just cultural…I think it was just that was the way things were done. And the – the autopsy report form that was used for many years had a section called "Summary of Abnormal Findings", which was an encouragement to – to list the sort of deviations from normal, but not really an encouragement to talk about the medicolegal opinion. And the – this sort of major tendency was to give those opinions in court.
>
> **Reference:** Evidence of Dr. Pollanen, 05/12/2007, p. 171, line 16 to p. 173, line 8
>
> My practice is not to render opinions on such things in the context of a post-mortem examination report, because I like to keep my post-mortem examination report sort of a separate distinct document that addresses the questions that the Coroner's Act – that the coroner is – is primarily asking about, and that's the opinion as to the cause of death.
>
> **Reference:** Evidence of Dr. Chiasson, 10/12/2007, p. 96, line 25 to p. 97, line 7
>
> Initially I – I was somewhat of a minimalist. I would just indicate the cause of death. And I think that was sort of tailored by the nature of the report form that was being used in the province.
>
> **Reference:** Evidence of Dr. Shkrum, 17/01/2008, p. 137, lines 15 to 19
>
> It reflects an evolution and – and a more rapid change recently in that the issues of opinion for example, the issues of the case summary, these were not integrated into the old report form. And so if you look at my reports from that sort of time period [1990s], there's nothing there..except cause of death…It's entirely conclusory.

Reference: Evidence of Dr. Dexter, 17/01/2008, p. 138, lines 10 to 24

> Well I think the form, which I believe is form 12, provided a pro forma, as I would call it, by OCCO. And it's a mandatory requirement for the pathologist to complete this form, recording the findings of the coroner's autopsy….The second issue is that the form itself may provide less space for subjective comments in general; impressions of the pathologist and remarks of the pathologist regarding his opinion, only because it has this style to it. And the style appears to be, for lack of – another expression, fairly strict. In other words, the spaces are limited, and the information that is required is, basically, indicated on the form.

Reference: Evidence of Dr. Butt, 19/11/2007, p. 109, lines 1 to 17

> But I would have to say that at the time back – and again, you have to remember we're going back eighteen (18) to twenty (20) years ago, things were very different, both in our practices in the legal field and in the medical field. I didn't necessarily expect a lot more by way of a post-mortem report than what I got. I didn't look at it and think, Oh, this isn't sufficient; this is inadequate; this isn't detailed enough. I'd seen other post-mortem reports. I didn't think that it stood out as being…much less informative or atypical of what we would have been getting.

Reference: Evidence of Terri Regimbal, 21/01/2008, p. 114, lines 10 to 23

193. Thus, not only would the reader of the report not be provided with any explanation as to the thought-process of the pathologist in rendering his conclusion on cause of death, but many forensically significant issues such as whether blows were sustained before or after death, the age of bruises, whether injuries were defensive, the time that the deceased may have lived after sustaining injuries, when the deceased would have been incapable of purposeful action, the position of the accused physically in relation to the deceased, the order in which injuries were sustained and the time of death would not be addressed at all in the report.

Reference: Evidence of Dr. Chiasson, 10/12/2007, p. 260, line 7 to p. 261, line 9

194. Dr. Chiasson defended this approach on the basis that frequently the other forensically relevant issues have not been identified at the time of the post mortem examination. But, even if a relevant issue is identified, Dr. Chiasson does not include an opinion on that issue in his post mortem report unless it can be articulated with certainty and succinctly. Unfortunately, in his experience, most of these issues produce "gray opinions".

Reference: Evidence of Dr. Chiasson, 11/12/2007, p. 150, line 22 to p. 151, line 12

195. Dr. De Nanassy and Dr. Michaud appear to concur that pathologists should not have to offer opinions in a "vacuum", noting that often the correlation of facts is difficult because so much changes from the date of the autopsy to the conclusion of the investigation.

> **Reference:** Evidence of Drs. Michard and de Nanassy, 20/12/2007, p. 136, line 10 to p. 143, line 20

196. Thus, it appears that the reviewers' criticism of Dr. Smith in the Jenna case regarding his failure to opine in his post mortem report on the timing of the abdominal injuries and in the Joshua case regarding his failure to discuss the issue of whether mould could have caused Joshua's death, for example, are misplaced.

4.02(4)(c) No Supplementary Opinions

197. Dr. Smith endured significant criticism for failing to render supplementary opinions on forensically relevant issues in a number of cases, including Athena, Joshua, Valin and Jenna. Again, this criticism appears to be unfair in light of the evidence at the Commission about the custom and practice of supplementary opinions at the time Dr. Smith was involved in pediatric death investigations and proceedings.

198. First, as stated above, it is important to note the post mortem report did not typically include any opinions on forensically relevant issues apart from cause of death.

199. Second, Dr. Chiasson acknowledged in his testimony that police and the Crown frequently inquire of the pathologist about their opinion on a variety of relevant issues. However, according to Dr. Chiasson, this communication is typically oral:

> If there's something critical in terms of - - of charging an individual…and it isn't in the PM report, the usual practice would be simply to have, you know, the police officer would approach you or the Crown would approach you and ask you the question. And in - - in my experience, it's often acted upon based on verbal opinions.

Reference: Evidence of Dr. Chiasson, 10/12/2007, p. 96, lines 5 to 12

200. Third and significantly, Dr. Chiasson advises that the extent of communication after post mortem examination between the pathologist and the Crown and/or police is typically quite minimal. As such, he acknowledged that the opinions he gives on forensically relevant issues at the preliminary hearing are often surprises to everyone involved in the criminal proceeding:

> …and I, to this day, go to the preliminary hearings, render all sorts of opinions that are not in my post-mortem examination report.

Reference: Evidence of Dr. Chiasson, 10/12/2007, p. 98, lines 2 to 4

See also: Dr. Chiasson, Policy Roundtable, 14/02/2008, p. 13, line 9 to p. 14, line 13

201. Fourth, Dr. Chiasson admitted that he found the oral communication during and following the autopsy troublesome because it often occurs when he is distracted by the examination itself. In result, Dr. Chiasson will not render an opinion on other forensically relevant issues unless and until he receives a written request specifically detailing the opinion requested:

> I think what I would want as - - as a pathologist is that - - that the questions be formalized; not somebody raising something during an autopsy while I'm dissecting the heart and he says Oh, by the way…I don't keep track of, you know, all the questions that are - - that are asked..So I think we need to be focused and – you know, I think the pathologist - - to be fair to the pathologist, he has to be addressed whatever questions that are important in a formal manner…if for some reason it's - - it's wanted before hand, then I think it behooves whoever is looking for this information earlier to actually lay it out in a - - in correspondence.

Reference: Evidence of Dr. Chiasson, 10/12/2007, p. 265, line 13 to p. 267, line 5

202. Dr. Chiasson further noted that he is careful to ensure that his opinion be founded upon a particular set of facts that are articulated by the Crown or the police in writing. In this way, his opinions are not manipulated or misinterpreted:

> And, you know, it's very much, I think, a thing that is - - it's either broached separate from the report in a separate document that the - - that the Crown writes to the – or the police officer, on behalf of the Crown, writes to the pathologist, so that, you know, this is why I'm answering this question and - - and this is the specific question. Because that's the other thing: Any time I have discussions with police officers or - - or lawyers, I say to them, Okay, you want this opinion in writing, fine, you send me the letter and you - - you phrase your question. And we all know a little turn of the phrase can have a major impact upon, you know, the nature of the question and the nature of the answer, so.

Reference: Evidence of Dr. Chiasson, 11/12/2007, p. 151, line 13 to p. 152, line 2

203. Finally, and perhaps most significantly, Dr. Chiasson acknowledged that it was uncommon for either the Crown or the police to request supplementary reports on forensically significant issues either prior to or even after the preliminary hearing.

Reference: Evidence of Dr. Chiasson, 11/12/2007, p. 17, line 4 to p. 19, line 13

204. Putting this evidence together, it appears that Dr Chiasson rarely wrote supplementary opinions on forensically relevant issues in the 1990s.

205. Dr. Smith has acknowledged that in cases in which he did receive a request for a written supplementary opinion, such as Joshua, Jenna and Athena, he ought to have simply produced the report, as requested. However, it would be unfair to characterize his reluctance to do as a sign of belligerence in light of the evidence that these requests were rare and the subject matter not understood to typically be found in pathologists' reports. Moreover, on some occasions, it appears that Dr. Smith was expected to write these supplementary opinions without receiving a written request with clearly delineated questions.

206. A review of Dr. Smith's response to these requests demonstrates that he was more baffled by them and uncertain as to how to respond than anything else. For example, in the Jenna case, in advising Dr. Cairns of the request from defence counsel for a report on the timing of injuries and seeking instruction as to whether or not he was obliged to do so, Dr. Smith states:

> *I am not entirely certain as to why he wants a letter from me*, after spending a day on the witness stand at the preliminary hearing…I had thought that, after so many hours on the stand, it was quite clear that I could not distinguish whether her fatal injury occurred while in the presence of the mother or the babysitter. [emphasis added]

Reference: Memo from Dr. Smith to Dr. Cairns, PFP053192

207. Likewise, in the Tiffani case, Dr. Smith was requested by the Crown, Sheila Walsh, to give a written opinion as to whether his post mortem findings were: (a) "consistent with a cause of death resulting from intentional asphyxiation by another party"; (b) "related to some disease that would have produced symptoms noticeable by the parents and, if taken to hospital, would have lived"; and/or (c) "there are some rare diseases of which [he] was aware which may not have provided symptoms such that medical care would have been obviously called for and would have prevented Tiffani's death". After several attempts to obtain the report in writing, Ms Walsh threatened to subpoena Dr. Smith and then adjourn his cross-examination so that the defence could prepare.

Reference: Letter from Sheila Walsh to Dr. Smith, PFP005580, at p. 2

208. Dr. Smith obtained advice from OCCO that he was not under any obligation to provide such an opinion. Nonetheless, he ultimately did produce the requested report, beginning his response as follows: "I am writing in reply to your *unusual request* for information in your letter of 3 June 1994". [emphasis added]

Reference: Email from Sheila Walsh to Edward Bradley, PFP136195
Letter from Dr. Smith to Sheila Walsh, PFP005723

4.02(5) Communication between Pathologists and Coroners

209. Just as undue casualness governed the collection and continuity of physical evidence involved in death investigations, Ontario's system of pediatric forensic pathology was also marked by the absence of appropriate formality governing critical communications amongst those involved in the death investigation. This is particularly evident with respect to communications between the pathologist and investigating coroner.

210. As the author of the post-mortem warrant received by a pathologist, the investigating coroner is the principal source of circumstantial and scene evidence that may be relevant to the pathologist in

interpreting his or her findings at autopsy. Indeed, the warrant provides the pathologist with the complete "terms of reference" for the autopsy, in that it both conveys authority on the pathologist to perform the autopsy and provides the pathologist with a sense of the autopsy's investigative purpose and scope. Moreover, should the pathologist have questions about a particular death investigation prior to commencing an autopsy, the investigating coroner is the pathologist's natural point of contact.

211. Despite the central importance of the warrant for post-mortem examination, the evidence before this Commission reveals that the amount and quality of information conveyed in the warrant varies widely.

> **Reference:** Warrant for Post Mortem Examination re Delaney, PFP002504 and PFP002398 (2-page history)
> Warrant for Post Mortem Examination re Katharina, PFP007597 (3-line history)
> Warrant for Post Mortem Examination re: Dustin, PFP001958 (1-para. history)

212. Drs. Lucas and Lauwers confirmed that, in the 1980s and 1990s, any guidance or oversight regarding the content of warrants for post mortem examination were significantly lacking:

> DR. WILLIAM LUCAS: I think that compared to the early '90s where you might have a warrant that says something along the lines of "apparent blunt-force trauma to the head" and that was the extent of the warrant in those days, now we expect a much more fulsome depiction of the scene, the relative position of body, whether there's evidence of blood spatter, all kinds of useful information that will be of assistance to the pathologist …[.]
>
> **Reference:** Evidence of Dr. Lucas, 07/12/2008, p. 76, line 22 to p. 77, line 5
>
> DR. ALBERT LAUWERS: Well, I started in '85 and I recall … [warrants for post mortem examination] were cryptic and … it was often the cause "found dead at home. What's the cause (question mark)?" That kind of performance wouldn't be acceptable today.
>
> **Reference:** Evidence of Dr. Lauwers, 07/01/2008, p. 77, lines 13 to 19.

213. Similarly, the quality of verbal communication between the investigating coroner and pathologist is highly variable, and indeed appears to be entirely absent in some cases. Several of the

Regional Supervising Coroners who testified at the Commission gave anecdotal evidence of how the quality of information conveyed by an investigating coroner to a pathologist may vary:

> I think that probably in the overwhelming majority of cases in my region the coroners will – will verbally speak to the pathologist prior to the autopsy and expand on some of the, what I might call, bullet points that they might include in their warrant for post mortem examination. …
>
> But as Dr. Lauwers said, there are some logistical and practical issues that come into play. And it may be that the coroner has been up all night and goes home to bed, and the pathologist is ready to start the autopsy before they've had a chance to communicate. It may be that the pathologist is not known to the coroner at the time that he's writing his warrant for post-mortem, so it's directed to the pathologist on call, so that – that we – we hope they're – the written communication is sufficient, that the pathologist has an understanding if what he's doing. And if necessary … the gaps can be filled in at a later time.

Reference: Evidence of Dr. Lucas, 07/01/2008, p. 69 line 14 to p. 70 line 12

214. It is also clear that there have been and continue to be no formal standards governing the documentation of oral communications between the investigating coroner and pathologist. There is clear potential for information that may qualify and inform the opinions of a pathologist at autopsy to be lost. This has implications both for the proper use and reliance on such opinions in the justice system, and for the proper appraisal of a pathologist's opinions should they later be called into question.

215. Drs. Lauwers and Edwards both noted that their review of the investigating coroners' work in the 45 cases that paralleled OCCO review of Dr. Smith was hindered by the complete absence of any documentation of communication between the investigating coroners and Dr. Smith. Dr. Lauwers acknowledged that the central recommendation flowing from the review was that there should always be direct, verbal communication between the investigating coroner and pathologist before each autopsy, and that such communication should be documented.

Reference: Evidence of Dr. Lauwers, 07/01/2008, p. 249, line 8 to p. 250, line 11

216. Despite their conclusion that in eleven cases the investigating coroner did not communicate sufficient information to Dr. Smith, Drs. Lauwers and Edwards have maintained that this did not

have any prejudicial effect on the quality of Dr. Smith's pathology in these cases. This conclusion is simply unsupported in the absence of appropriate documentation. Moreover, this conclusion was based in large part on the fact that "there would be valuable information provided [to the pathologist] by both the policing services, the hospital records and other sources of information" – an observation that only serves to underscore the haphazard manner in which information was relayed to pathologists, and the fact that the onus apparently rested with the pathologist to gather information at his or her discretion without any concurrent responsibility for the investigating coroner to ensure that the information received is appropriate and complete.

Reference: Evidence of Dr. Edwards, 07/01/2008, p. 251, lines 14 to 20
Evidence of Dr. Lauwers, 07/01/2008, p. 237, line 21 to p. 238, line 7

4.02(6) Post-Autopsy Communication with Police

217. In light of a culture that appeared to prefer (or at least accept) skeletal reports, the oral communication between the pathologist, the police and the Crown was central to the use of pathology in the criminal justice system. Unfortunately, as Dr. Pollanen acknowledged, there is a danger of a "disconnect" between what is communicated or disclosed to the parties in the administration of justice by the pathologist and what ultimately is said when the case proceeds to preliminary hearing or trial and the pathologist formally communicates for the first time his or her opinions on forensically significant issues.

Reference: Dr. Pollanen, 05/12/2007, p. 171, lines 11 to 19

218. Many who testified acknowledged the danger of the police or the Crown making decisions based upon incomplete or misunderstood oral information about pathology. For example, Dr. Crane noted the challenges associated with relying on the police to translate pathology opinions into criminally relevant conclusions:

> The difficulty can be that, first of all, the police officer is writing something down. He may write it down incorrectly. Or it may be that he only writes down, perhaps, what he wants to hear or only part of what you've said…sometimes the police can be overzealous and can just pick up on part of what you've said, rather then taking it, perhaps, in its - - its proper context.
>
> **Reference:** Evidence of Dr. Crane, 19/11/2007, p. 85, line 14 to p. 86, line 7
>
> The problem with verbal communications is they can be distorted, people's recollections may change…
>
> **Reference:** Evidence of Dr. Crane, 19/11/2007, p. 132, lines 4 to 7

219. Yet, it appears this concern about distortion of pathology opinions did not stop those in the criminal justice system from relying on oral communications.

220. For example, Dr. McLellan testified that the practice of holding early case conferences was critical to prevent police from acting on misinformation:

> …and I feel that - - that's what's most important…is that the police need to clearly understand that if they're laying charges or proceeding based specifically on information from the autopsy, the early case conference is an opportunity to make sure that what is and is not known is best understood by the police before making such a decision.
>
> **Reference:** Evidence of Dr. McLellan, 14/11/2007, p. 199, lines 13 to 20

221. But Dr. McLellan acknowledged that in the 1990s, the practice of early case conferences was not common:

> …in the '90s it would be very uncommon to have had one (1) of these early case conferences…It wasn't formalized and it wasn't encouraged …
>
> **Reference:** Evidence of Dr. McLellan, 14/11/2007, p. 218, lines 16 to 23

222. What is also clear is that even when case conferences were held, there was rarely any formal documentation of the discussion or plan going forward.

> **Reference:** See Section 8.02(4)

223. Dr. Milroy admitted that his practices had only recently changed with respect to documenting his communications with the police:

> …at the end of the autopsy we will brief – debrief the police officers of our findings because they may well use those to go away and arrest or charge somebody. Now we don't always do this, but there is a

> *developing* practice that we actually – we certainly dictate to the police, and they take a note. Sometimes, we actually sign that note, and that is something we're *looking to develop* into a more formal – more formal process so that we have agreement between us as to what we have said at the autopsy and have a record of it. [emphasis added]

Reference: Evidence of Dr. Milroy, 19/11/2007, p. 79, line 17 to p. 80, line 2

224. Moreover, when asked whether or not a practice of video-taping the autopsy would be useful to avoid confusion, Dr. Milroy rejected the proposal on the grounds that it would disturb the "free flow of thinking" that occurs at the autopsy. Clearly, there is much that occurs at the autopsy that police officers are privy to that is prone to misinterpretation.

Reference: Evidence of Dr. Milroy, 21/11/2007, p. 120, line 12 to p. 121, line 15

225. Indeed, it is for that reason that many pathologists request that police officers not take notes during the autopsy, a practice for which Dr. Smith was criticized by the investigating officer in the Joshua case.

Reference: Evidence of Dr. Shkrum, 17/01/2008, p. 121, line 16 to p. 122, line 7
Evidence of Dr. Dexter, 17/01/2008, p. 128, line 5 to p. 129, line 13
Evidence of Dr. Rao , 17/01/2008, p. 131, lines 12 to 18
Evidence of Insp. Keetch, 14/01/2008, p. 34, line 23 to p. 35, line 6
Evidence of Insp. Begbie, 24/01/2008, p. 182, line 12 to p. 183, line 7
Evidence of Sgt. MacLellan, 24/01/2008, p. 20, lines 6 to 20

226. There is little doubt that Ontario's tradition of oral reporting during and/or after autopsy was prone to confusion and mis- or over-interpretation. Dr. Smith appears to be blamed entirely for the miscommunication that occasionally occurred amongst him, the police and the Crown. Without intending to diminish the importance of clear communications, it appears that he was but one of many who paid inadequate attention to this issue during the 1980s and 1990s.

4.02(7) Insufficient Communication and Preparation with Crown

227. Compounding the risks associated with the tradition of oral communication with the police was the common problem of inadequate communication between the pathologist and the Crown prior to the preliminary hearing.

228. Dr. Chiasson described the typical cycle of a death investigation as follows:

> …the vast majority of cases – there's one (1) meeting prior to the preliminary hearing. And this is the usual situation is you do an autopsy, the police are there, you provide them with a preliminary opinion and…and nothing. You - - you prepare a report, you finalize your report and whenever a preliminary hearing's coming out is – that's when you usually when you hear back from the police and/or Crown attorney about a - - about a matter. The vast majority of cases, there's not much going on between those - those two (2) time points.
>
> **Reference:** Evidence of Dr. Chiasson, 11/12/2007, p. 20, lines 15 to 24

229. Indeed, Dr. Huyer testified that there are still occasions when he does not meet with the Crown prior to testifying even when he has offered to do so:

> Every summer I attend Crown school to provide education and expert testimony; so working with the legal people who are going to be calling the experts, and I still continue to be amazed at the number of times that I am called -- and I'm going to testify as an expert, and I'm not prepped.
>
> And -- and they haven't even called an expert before ever. They meet me half an hour before and they go, We've never called -- I've never called an expert, how do you do this? So I'm telling the Crown attorney how to qualify me as an expert, what process to follow.
>
> And it's -- it's unbelievable to me at times that that can continue to happen despite my best efforts. Because I say, Look, I'll come meet with you or we'll have an email conversation or I'll -- I make myself available,
>
> . . .
>
> And it -- it just continues to surprise me that that happens.
>
> **Reference:** Evidence of Dr. Huyer, 10/01/2008, p. 229, line 3 to p. 230, line 3

230. The nineteen cases under review demonstrate a relative dearth of preparatory meetings between the Crown and Dr. Smith prior to the preliminary hearing. OCCO has acknowledged that the Crown rarely attended case conferences in the 1980s and 1990s. Indeed, there is little record of any communication between Dr. Smith and the Crowns in the nineteen cases under review.

> **Reference:** OCCO Institutional Report, PFP149431, at p. 54

231. Moreover, there appear to be numerous cases in which the Crown inexplicably claims to have been surprised by Dr. Smith's oral testimony. This surprise has been attributed to Dr. Smith either changing his opinion or inadequately communicating his opinion. However, there is another

explanation – that is, that the Crown was insufficiently attentive to and/or unable to understand pathology opinions and their limits.

232. For example, in the Tiffani case, police notes demonstrate that Dr. Smith advised the police in August 1993, less than two months after his post mortem examination, that Tiffani likely died from an asphyxial mode of death. Additionally, Dr. Smith is recorded as advising the police that "difficulty is how did asphyxia occur".

Reference: Notes of D/Insp. Smith, PFP118841, at p. 22

233. In February 1994, Dr. Smith met with Dr. Cairns, Dr. Bechard (the Regional Supervising Coroner), the police and the Crown, Sheila Walsh. Again, police notes suggest that Dr. Smith advised those present that he "cannot give definite mechanisms of death as insufficient materials available from autopsy to give or make absolute determination as to method of death".

Reference: Notes of D/Insp. Smith, PFP118841, at p. 36

234. Dr. Smith ultimately produced a supplementary written opinion in which he stated:

> In general, the cause of some forms of asphyxia can be determined at post mortem examination (e.g. ligature mark from hanging; hot dog obstructing the trachea), while in many instances the etiology of an asphyxia cannot be determined on morphologic grounds alone. *Asphyxia does not necessarily indicate that the death was accidental or non-accidental*, because there are some forms of natural disease which have an asphyxial mechanisms as well. Tiffany's autopsy findings do not indicate the cause of asphyxia. They are consistent with non-accidental event such as suffocation. *However, the examinations do not rule out the possibility of a natural disease causing her death.* [emphasis added]

Reference: Letter from Dr. Smith to Sheila Walsh, PFP005723

235. Although this report appears entirely consistent with what Dr. Smith initially told the police and Ms Walsh, in a memo to her successor Crown, Lee Burgess, Ms Walsh claims to have been surprised by Dr. Smith's report and describes it as being "so weak that the defence will have a field day".

Reference: Memorandum from Sheila Walsh to Lee Burgess, PFP103645, at p. 4

236. Equally surprising is Mr. Burgess' memo to file regarding his conversation with Dr. Smith in February 1995. At that time, Mr. Burgess records that Dr. Smith, again advised that the terminal event was an asphyxial death but "that he could not be any more certain about it than that". Dr. Burgess also noted that Dr. Smith said that the death was "consistent with suffocation" but that "it was not inconsistent with non-intentional suffocation". Like Ms Walsh, Mr. Burgess appears to be surprised by Dr. Smith's opinion, despite there being a clear record that Dr. Smith's opinion remained the same throughout the case regarding the mechanism of death:

> It appeared to me that Dr. Smith is severely backtracking from what I understood his position to be, particularly given the conclusions he purportedly stated as reflected in Sheila's letter to him of April 4, 1994. He indicated to me that Dr. Bechard and the police thought this was a crime and were trying to convince him that the conclusion should be consistent with that, but that he just could not be so certain.
>
> **Reference:** Memorandum from Lee Burgess to File, PFP103645, at p. 1

237. It is, frankly, inexplicable that the Crown were surprised by Dr. Smith's opinion, unless they failed to adequately appreciate his previous advice, which is documented by the police. This illustrates the danger of oral communication – people can rely on oral pathology opinions as they wish and claim ignorance regarding the expressions of limitation from pathologists.

238. Likewise, in the Dustin case in which Dr. Smith was involved as a consultant for a second opinion, the Crown Sheila Walsh claimed that Dr. Smith testified to certain limitations arising from the manner in which the original autopsy was performed that came as a surprise to her:

> Dustin died as a result of being violently shaken. The post mortem was done in Kingston by a pathologist who had no experience with infants. The brain was mistakenly put into water instead of the proper preservative solution. Dr. Smith reviewed the medical information and expressed an opinion that the cause of death was related to a violent shaking. During cross examination at the preliminary inquiry, Dr. Smith seemed to unravel a bit and became very emotional in his criticism of the initial post mortem…All of this was news to me. I could have saved a lot of time and trouble if I had known he held this opinion from the start.
>
> **Reference:** Email from Sheila Walsh to John MacMahon, PFP103634, at p. 1

239. But there is evidence in the police notes that Ms Walsh was advised of the limits of the first post mortem by Dr. Smith in a meeting held four months prior to the preliminary hearing. Police notes reveal that the "probs with the case" were discussed including the post mortem. Specifically, the police note that there was no evidence of proper scalp examination to rule out external blow, no examination of spinal cord which is often supportive of shaken baby syndrome, no thorough examination of the brain and no good photographical view to enable determination of whether hemorrhage was uniform or localized. Again, it is not clear why Ms Walsh subsequently claimed to be ignorant of these limitations unless she simply was not paying any attention to the limits of the pathology opinion.

Reference: Handwritten Notes, PFP079668, at p. 2

240. As should be abundantly clear, oral communications are prone to misinterpretations, particularly when the subject matter is as complex and controversial as pediatric forensic pathology. But the fact that there were miscommunications is not attributable entirely to Dr. Smith. All parties to the communications must accept their share of responsibility for the lack of clarity as to the limits of the pathology evidence in relation to a particular death investigation.

4.03 EXPERIENCE-BASED OPINIONS

241. One of the most significant aspects of the culture of pediatric forensic pathology in Ontario in the 1980s and 1990s was the more relaxed and individualistic approach to rendering opinions on cause of death. In the absence of a uniform approach to the attribution of "cause of death" in forensic pathology, pathologists rendered opinions primarily on experience, were reluctant to admit that cause of death was unknown and developed idiosyncratic ways to communicate their opinions.

> …the traditional approach to expert witness testimony…which is, opinion from authority; the in-my-experience approach to forensic pathology. Which admittedly may have value. There's no - - there's no question in that, but that was the more classical, time honoured and, in fact, legally

> preferred in many circumstances approach to giving expert witness testimony; based upon the authoritative experience of a witness of great experience.
>
> **Reference:** Evidence of Dr. Pollanen, 12/11/2007, p. 177, lines 7 to 16

242. Today, Dr. Pollanen advocates for an approach to pathology that is more scientific, or what he describes as "evidence-based pathology":

> …evidence-based approach is with reference to primary data from the first four steps of the autopsy and in reference to the foundations that are present in the medical literature and the use of logic to arrive at an opinion in a fashion that can be explained in - - in a step-wise progression in the autopsy report, ultimately, culminating in your final determination on the forensically-relevant issues…usually the cause of death but need not be simply the cause of death.
>
> **Reference:** Evidence of Dr. Pollanen, 12/11/2007, p. 174, line 21 to p. 175, line 6

243. Dr. Pollanen described the distinction between these two approaches succinctly:

> In evidence-based forensic pathology the emphasis is placed on the scope and limits of empirical evidence that are established in large measure by the peer-reviewed medical literature. This approach de-emphasizes anecdotal evidence or authoritative claims based largely on personal experience that can seldom be quantified or independently tested. Evidence-based forensic pathology also emphasizes reviewable data and is more compatible with a scientific approach to diagnosis…Clearly, experience and anecdotal cases still do sometimes form a valid basis for expert opinions, the latter often providing contrary examples to dogma. On this basis, a balance between an evidence-based and experience-based perspective is healthy. However, an evidence-based culture in forensic pathology will foster practices that create opportunities to detect and recognize the significance of critical evidence, including contradictory evidence that might challenge a prevailing investigative theory or dogmatic expert opinions. The other value of evidence-based forensic pathology is that the approach often leads to more balanced expert witness testimony during direct examination, rather than relying on a cross-examiner to identify points that the expert should concede.
>
> **Reference:** Pollanen, "Systemic Issues", PFP301189 at p. 5

244. While it is appropriate and indeed necessary today to review the pathology in cases of convictions using the evidence-based approach, it is inappropriate to judge Dr. Smith's work from the standard of evidence-based medicine and to conclude he made "errors" using this approach. His opinions were acceptable within the experience-based culture in the 1980s and 1990s, before evidence-based medicine was even conceived:

> Well, I think if you bring it back down to some - - some of the primary issues related to forensic pathology, we see miscarriages of justice and wrongful conviction as an end stage manifestation of a more primary failure earlier on in the - - in the forensic pathology process. And that stems from many of the features of the discipline that we've talked about. But in my view, the most profitable initial starting point is the evidence-based framework, and proceeding with that on a truth-seeking platform.

> And I think that that is the most fundamental change or – or cultural change that needs to occur in the broader global forensic pathology community.
>
> **Reference:** Dr. Pollanen, Policy Roundtable, 21/02/2008, p. 100, line 18 to p. 101, line 5
>
> …in fairness, the concept of evidence-based medicine is – is relatively recent.
>
> **Reference:** Evidence of Dr. Whitwell, 14/12/2007, p. 172, lines 24 to 25

245. This experience-based approach to pediatric forensic pathology is well illustrated in four specific areas of the practice of forensic pathology: (1) the evolution of the use of unascertained as a cause of death; (2) the use of circumstantial evidence to support diagnoses; (3) the reliance on psycho-social factors; and (4) the language used by pathologists in Court to explain the certainty with which they hold their opinions.

4.03(1) Use of Unascertained not Widespread

246. Both Drs. Crane and Milroy noted that in the past, pathologists were reluctant to admit that the autopsy findings did not lead to a clear cause of death. Several reasons were offered for this reluctance, including a desire to offer answers to family members and authorities, a tendency not to question intuition and experience and a perception that the judicial system prefers an expert who is certain over one who is indecisive or hesitant:

> COMMISSIONER STEPHEN GOUDGE: Looking back over the last fifteen (15) years…is there any way of, even impressionistically, giving a view about whether cause of death unascertained is now more readily used as a conclusion than it was fifteen (15) years ago?
>
> DR. JACK CRANE: I certainly think I use it more, Commissioner, than I did…I think we are now being more careful in how we consider cases. I - - I think we - - we are trying to do them in a - - with greater care. I think we take greater time over them. And for all of those reasons, I think, perhaps, we, in many cases, are slightly reticent to, you know, nail our colours to the mast and be - - be definitive about things.
>
> **Reference:** Evidence of Dr. Crane, 21/11/2007, p. 70, line 18 to p. 71, line 14
>
> … some people may be perceived as being good witnesses. Because their testimony is forceful, they may be unprepared to consider alternative explanations or, indeed to concede points in cross-examination. And courts, and sometimes juries, are often impressed by those medical experts who appear very sure of their ground, whilst perhaps being less impressed with the expert who's prepared to say, well I don't know, I don't know what the answer is or the one who's prepared to consider alternate explanations.

Reference: Evidence of Dr. Crane, 21/11/2007, p. 87, line 22 to p. 88, line 6

> And some people don't like the term unascertained, and that came out in the Kennedy report, because for some reason some people think that it implies potential action on the part of the parents.

Reference: Evidence of Dr. Milroy, 19/11/2007, p. 262, lines 5 to 8

> We actually got criticised for that [using unascertained] by some of the pediatric groups saying well, you should call these SUDI, but - - which means "Sudden Unexpected Death in Infancy", but the reality is it's the same thing. And, certainly, I think there has been a greater willingness to use "unascertained" not just because we're getting older, but because I think it's appreciated that, you know, we shouldn't guess in the way we may have done. And it's now, if you like, a standard chapter in textbooks and in articles, you know, the "negative autopsy"…so, that there is a sort of culture of questioning more than we did in previous times.

Reference: Evidence of Dr. Milroy, 21/11/2007, p. 72, line 6 to p. 73, line 6

247. This experience appears to have been the case in Ontario given that the number of deaths categorized as SUD ("sudden unexpected death") in Ontario rose though the 1990s. As Dr. Milroy stated, the classification is "essentially the same" as "unascertained".

Reference: Paediatric and Child Death Investigations, PFP304380, at p. 9
Evidence of Dr. Milroy, 21/11/2007, p. 72, lines 3-10

248. One of the primary reasons the term unascertained was not commonly used was the absence of well-established diagnostic criteria for various key forensic diagnoses. If there is no established standard for minimally sufficient evidence to make a particular diagnosis, pathologists who want to be seen as providing definitive answers can comfortably do so, particularly when such a diagnosis matches their experience. As Dr. Milroy noted, there is "no bright line" to distinguish undetermined from determined.

Reference: Evidence of Dr. Milroy, 23/11/2007, p. 74, lines 4 to 12

249. The approach most pathologists likely took in the past regarding cause of death was described by Dr. Cordner in "A Model Forensic Pathology Service":

> However, concluding the cause of death is certainly a fundamental responsibility for all forensic pathologists. Yet very little has been written about the criteria that need to be satisfied to make a decision. Leaving aside the minority of cases where the lesion observed at autopsy is incompatible with life (e.g. decapitation), what in fact usually happens in coming to a conclusion in particular cases is that a cause of death discovered at autopsy, which accords with the medical history and

> circumstances, is elevated to the cause of death. In general terms, the pathologist makes a decision or concludes that a certain autopsy finding, or combination of findings, is capable of causing death, and that this is consistent with the deceased's medical history and circumstances of death. A conclusion about the cause of death is, obviously, retrospective and generally cannot be tested. This diagnostic exercise is quite different to diagnosis in clinical medicine.
>
> **Reference:** Cordner, "A Model Forensic Pathology Service", PFP174486, at pp. 42-44

250. It is not surprising that the experts for the Chief Coroner's Review, presumably adopting an evidence-based approach to pathology, offered "unascertained" as the most reasonable cause of death for more than 55% of the cases criticized (11/19). If the experts had approached the review from the perspective of Dr. Smith at the time he conducted the post mortem examination and had used an experience-based approach, they would likely have noted that a cause of death was available that was consistent with the medical history and circumstances and that many pathologists at the time would have rendered a more definitive diagnosis, rather than "unascertained", based on experience. This Commission should not judge Dr. Smith for adopting an approach which appears to have been the only one used by pathologists during the time in question.

4.03(2) Use of Circumstantial Evidence

251. As noted above, in the past, if pathologists could point to a cause of death from the autopsy that was "consistent with" the medical history and circumstances, it was often rendered definitively. This reflects the widespread practice of using circumstantial evidence more liberally in reaching a diagnosis of the cause of death than might be used today.

252. Dr. Pollanen acknowledged that even today, there are pathologists who rely on circumstantial evidence more than he would deem appropriate. For example, Dr. Pollanen would not rely on confessions because of the possibility of legal challenges. And yet, he acknowledged that some pathologists do still rely on confessions:

> DR. MICHAEL POLLANEN: ..It would not be reasonable for a pathologist to say The autopsy is negative, the police have told me that the mother said that she smothered the baby, therefore, I give the cause of death as smothering. That would be incorrect.
>
> MR. MARK SANDLER: …There are forensic pathologists that - - that do exist, that take the circumstantial evidence to that degree, do they not?
>
> DR. MICHAEL POLLANEN: There are...And I would disagree with that.
>
> **Reference:** Evidence of Dr. Pollanen, 05/12/2007, p. 77, line 24 to p. 78, line 13
>
> DR. MICHAEL POLLANEN: ….we may have, for example, a child with a negative autopsy, who's three (3) months of age, who is certified as SIDS, natural – the cause of death, SIDS, the manner of death, natural. And then at some later point in time, another child … was smothered and the pathologist is - - is then on notice. To what extent is it reasonable for a pathologist to then factor in that additional information at arriving at a cause of death? And most forensic pathologists would resist that, and would not be swayed into the overuse of circumstantial information of that type.
>
> MS LINDA ROTHSTEIN: And I take it that you're at least hinting that there's a minority opinion in your profession that would disagree with you.
>
> DR. MICHAEL POLLANEN: Oh, yes, for certain.
>
> **Reference:** Evidence of Dr. Pollanen, 13/11/2007, p. 179, line 7, p. 180, line 2

253. Indeed, it appears that Dr. Crane is one of the pathologists who is prepared to rely on confessions:

> MS JANE LANGFORD: …If the police were to advise you that they received a caution – a cautioned statement from an individual who stated that they had placed their infant in a bag – a plastic bag, for example, you would feel comfortable diagnosing – and I take your point that you would probably just use the term "plastic bag suffocation" But you would feel comfortable with a diagnosis of asphyxia due to plastic bag suffocation?
>
> DR. JACK CRANE: Yes…what I would do is I would be comfortable to put that in my cause of death. But in my commentary, I would explain how I came to that conclusion. In other words, on the basis of information that was provided to me. And I would also have to make the point that the autopsy didn't reveal anything, but that would not be unexpected if nothing would be expected to find on post-mortem examination.
>
> **Reference:** Evidence of Dr. Crane, 21/11/2007, p. 214, lines 7 to 24

254. Others admit to struggling with the issue. Dr. Shkrum testified that he would appreciate further guidance on the propriety of relying on confessions.

> **Reference:** Evidence of Dr. Shkrum, 17/01/2008, p. 118, line 11 to p. 117, line 14

255. Dr. Pollanen did acknowledge that it is appropriate for pathologists to consider circumstantial evidence: "The question is how much and to what effect". But in a cultural framework that was

experience, not evidence-based, one can easily appreciate the threshold or "bright line" was lower than it is today. As will be elaborated below in Parts 7 to 9, in considering the foundation for Dr. Smith's opinions in the nineteen cases that are subject to review, it is important to reflect on the experience-based approach to pathology when judging his use of circumstantial evidence.

Reference: Pollanen, "Systemic Issues", PFP301189 at pp. 6-7
Evidence of Dr. Pollanen, 13/12/2007, p. 177, line 17 to p. 179, line 1
Evidence of Dr. Pollanen, 15/12/2007, p. 76, line 24 to p. 81, line 7

4.03(3) Reliance on Psycho-Social Factors

256. While Dr. Smith has been criticized for referencing psycho-social factors in his testimony and the internal HSC autopsy reports, what is evident is that psycho-social factors were considered factors in diagnosing child abuse when injuries were capable of both abusive and accidental explanations in the 1980s and 1990s.

257. Drs. Driver and Huyer provided a litany of factors, identified in the literature, that were routinely used to assist in determining whether a child's injury or death was caused by child abuse including:

(a) The demeanour of parents whose child is nearing death or has died;

Reference: Evidence of Dr. Huyer, 09/01/2008, p. 79, line 19 to p. 80, line 19

(b) Isolation;

(c) Financial difficulties;

(d) Stressful situations;

(e) Lack of bonding between parent and child;

(f) The parent's background;

(g) Previous CAS involvement;

(h) Single parents;

(i) Number of children;

(j) Housing situation;

(k) Social network; and

(l) Mental status.

Reference: Evidence of Dr. Driver, 09/01/2008, p. 82, line 13 to p. 85, line 13

258. While child abuse experts still rely on these factors to determine whether a child is at risk of future abuse, these factors are no longer considered relevant to the diagnosis of child abuse and the SCAN team ceased collecting this information in 1999. This recent change in practice derived from a change in the literature.

Reference: Evidence of Drs. Huyer and Shouldice, 09/01/2008, p. 92, lines 2 to 21
Evidence of Dr. Huyer, 09/01/2008, p. 100, line 6 to p. 102, line 4

259. Dr. Milroy also admitted that he often has more casual conversations with the police that extend beyond the confines of the pathology, similar to conversations Dr. Smith was harshly criticized for in the Joshua case:

> DR. CHRISTOPHER MILROY: …pathologists do research which is wider than the individual pathology case. So, for example, when I did my MD thesis it was about people who kill and commit suicide, so there is a literature that uses data that is beyond the individual case and would – in this case, to be fair to Dr. Smith, include knowledge that the typical person who kills has the following characteristics. And for – you may tell the police that, in terms of their – and this is just a basis for investigation, but you don't go on to say this, therefore, proves that the person killed the victim.
>
> COMMISSIONER STEPHEN GOUDGE: You would be a little reluctant, perhaps, to talk about your research generically?
>
> DR. CHRISTOPHER MILROY: Yes.
>
> COMMISSIONER STEPHEN GOUDGE: You might not be reluctant telling the police that?...Why the difference?
>
> DR. CHRISTOPHER MILROY: Because I think you've got to be very careful on the individual case. You may not have all the facts, but you can give them a general help in their investigation…I would say, Look, these are the characteristics, but if you want to find out whether someone is psychiatrically disordered…you may say to the police, this person may have a psychiatric disorder, but if you want to

> find out whether they've got a psychiatric disorder, go and ask a psychiatrist…in terms of going and conducting their investigation, you may be able to help them.
>
> **Reference:** Evidence of Dr. Milroy, 20/11/2007, p. 236, line 13 to p. 238, line 25

260. There is no evidence to suggest that Dr. Smith's advice to the police in these cases was on any different basis – that is, he simply gave the information to the police to assist their investigation, not to suggest it was necessarily applicable to a particular suspect.

4.03(4) Use of Colourful Language, Anecdotal and/or Unscientific Explanations

261. Dr. Smith has also been criticised for the language he chose to communicate his opinions in court. For example, he is criticized for:

(a) attempting to mislead the Court by using the phrase "consistent with";

(b) inappropriately referring to his own personal experiences; and

(c) using language of exclusion such as "in the absence of a credible explanation, I must assume these injuries are non-accidental"

Reference: Medico-Legal Report re: Tamara, PFP135457, at p. 6
Medico-Legal Report re: Tiffani, PFP152220, at p. 7
Evidence of Dr. Whitwell, 12/12/2007, p. 71, line 12 to p. 73, line 3
Evidence of Prof. Saukko, 13/12/2007, p. 31, line 23 to p. 32, line 9
Evidence of Dr. Crane, 21/11/2007, p. 68, line 9 to p. 69, line 17

262. Before one condemns Dr. Smith for his testimonial failures, several explanatory factors should be noted.

263. First, Dr. Smith had no training on how to give testimony in Court. Indeed, there is no evidence that any formal training was available for pathologists practicing forensic medicine in Canada in the 1980s and 1990s, nor other experts who give evidence related to child abuse. It was "literally on-the-job training".

Reference: Evidence of Drs. Rao, Shkrum and Dexter, 18/01/2008, p. 66, lines 4 to 13
Evidence of Dr. Driver, 09/01/2008, p. 48, lines 3 to 13
Evidence of Dr. Huyer, 09/01/2008, p. 49, lines 7 to 24

264. Second, his conversational and personal style was reflective of the experience-based approach to pathology. He spoke from a position of "authority", relying on his experience, which undisputedly was significant in the Canadian pediatric context.

265. Third, likely due to his lack of forensic training, Dr. Smith perhaps did not appreciate the proper role of expert testimony. Even Dr. Chiasson noted that he would be more willing to provide certain opinions orally, on the fly, in the courtroom, than he would in a written report:

> And the limits of -- of an opinion -- I mean, that -- that, in and of itself, does require some forethought, you know. And to put it pen to paper when you're talking about the limits -- how comfortable are you…I think there is advantage for the pathologist to say, Okay, how comfortable I am -- you know, where am I going to go on a piece of paper, as opposed to what you might say in -- in a courtroom of law…And...a courtroom is a situation, if you're comfortable in that area you sometimes say things that are -- that you might not put pen to paper on, and it's just the nature of -- of the -- the environment…is a different environment.

Reference: Evidence of Dr. Chiasson, 11/12/2007, p. 154, line 25 to p. 155, line 13

266. Fourth, and perhaps most significantly, the record is replete with evidence that many of the phrases or statements Dr. Smith used and was criticized for were similar to those used by other expert witnesses practicing at the time.

267. For example, the evidence before the Commission reveals that the term "consistent with" was and remains a widely used phrase in all fields of medicine, including forensic pathology:

> I think that pathologists in general frequently use the term "consistent with", and I think probably I'm as guilty as any other pathologist in using the term.

Reference: Evidence of Dr. Crane, 19/11/2007, p. 205, lines 12 to 15

> It is a pervasive terminological difficulty in surgical pathology, forensic pathology…It's a problem.

Reference: Evidence of Dr. Pollanen, 05/12/2007, p. 192, lines 12 to 18

See also: Evidence of Drs. Shkrum, Rao and Dexter, 17/01/2008, p. 156, line 3 to p. 159, line 2

268. When speaking about a death where autopsy findings include a laceration on the scalp and a blood-stained hammer nearby, Dr. Crane gave the following testimony at the Commission on how he would co-relate the hammer and the wound in testimony:

> I'm saying that those features would indicate that the injury was caused by a weapon with a circular head. I'm not saying that it was that particular hammer, but I'm saying *it's consistent with having been made by* – or was – was caused by a weapon that had a circular head.
>
> **Reference:** Evidence of Dr. Crane, 19/11/2007, p. 210, lines 10 to 16

269. There is no dispute that the phrase "consistent with" can be misunderstood to mean that the pathologist believes a particular cause of death is more certain than it is based on the pathology findings. However, simply put, there appear to be no other phrases that can better convey what the pathologist wants to offer as the relationship between certain autopsy findings and a particular cause of death:

> COMMISSIONER STEPHEN GOUDGE: What do you think of it as a phrase for post mortem report?
>
> DR. MICHAEL POLLANEN: Well, I tend to avoid it. However, we actually then just replace it with euphemism. We just basically say "compatible with".
>
> COMMISSIONER STEPHEN GOUDGE: That's no better.
>
> DR. MICHAEL POLLANEN: No, I realise that. But the issue that comes from the Morin report that I think it quite valuable there is that sometimes rephrasing it into the language of exclusion can be helpful because it changes the emphasis slightly and…it better communicates the nuance that you want to communicate. The problem with it is, and this happens to me in Court occasionally, on advice from Morin, they say "Don't you just mean consistent with?" And sometimes that comes from Judges: Dr. Pollanen, you're confusing me, don't you just mean "consistent with".
>
> **Reference:** Evidence of Dr. Pollanen, 05/12/2007, p. 191, line 4 to p. 192, line 4

270. The reviewers' criticism of Dr. Smith in the Tamara, Taylor, Valin and Kasandra cases for his use of "consistent with" (based at least in part on the English Court of Appeal's decision in *R. v. Puaca*, decided in 2005) should, with the greatest of respect, be tempered by their admission that they themselves do not always do as they say others should.

271. Similarly, Dr. Smith is criticized for referencing his own personal experiences when trying to explain himself in testimony in the Amber and Kenneth cases. Yet, Crown Terri Regimbal noted that other expert witnesses made reference to their own personal experiences during their testimony.

Reference: Evidence of Terri Regimbal, 21/01/2008, p. 115, line 1 to p. 116, line 20

272. Dr. Smith was also criticized for conveying his suspicions in testimony. For example, Dr. Crane testified: "…in my view, it's inappropriate for the pathologist to use terms like 'I'm highly suspicious of'. Again, I think that may have an inappropriate or – an inappropriate effect on the jury".

Reference: Evidence of Dr. Crane, 19/11/2007, p. 207, line 23 to p. 208, line 4

273. Likewise, Dr. Milroy stated that suspicions "are not based on any scientific objective pathology evidence" and that by referring to them, a pathologist is "putting your own value on other evidence".

Reference: Evidence of Dr. Milroy, 19/11/2007, p. 212, lines 12 to 19

274. And yet, the term suspicious was used frequently in the Reviewer's reports provided to the Commission.

Reference: Medico-Legal Report re: Gaurov, PFP136013, at p. 5
Medico-Legal Report re: Jenna, PFP135465, at p. 5
Medico-Legal Report re: Kenneth, PFP135439, at pp. 6 and 8
Medico-Legal Report re: Tamara, PFP135457, at pp. 4 and 7
Medico-Legal Report re: Delaney, PFP135429, at pp. 6 and 8

275. Dr. Whitwell also testified that both the Gaurov and Taylor cases were "suspicious".

Reference: Evidence of Dr. Whitwell, 13/12/2007, p. 171, line 21 to p. 172, line 4 and p. 240, line 17 to p. 241, line 3

276. Similarly, when describing the Tamara case, Dr. Milroy did not hesitate to convey his suspicions about the circumstances of that death:

> Well, in my opinion, this is a case where the cause of death has to be recorded as undetermined…So whilst inevitably one has, if you like, concerns about this case, this case being a -- *very suspicious on the circumstances* and the fact that there are skeletal fractures of varying age, which are -- have the appearances of being non-accidental. The actual cause of death cannot be determined on this autopsy.
>
> **Reference:** Evidence of Dr. Milroy, 21/11/2007, p. 24, line 17 to p. 25, line 7

277. Indeed, Dr. Milroy echoes a phrase oft-used by Dr. Smith, "in the absence of credible explanation, this injury must be considered non-accidental", when he refers to some of the injuries on Tamara's body:

> I think that when – when you have this constellation of fractures *it's difficult to conceive of the innocent explanation for them,* so in my opinion this – this child shows evidence of child abuse. The exact mechanism of death is not determined…by the…autopsy findings, although there are non-innocent explain -- or nonnatural explanations for it, including something being pushed into the mouth and effectively the child choking -- or smothering – smothering possibly with an element of chocking, there may have been some vomit in -- in that process which has gone into the stomach and caused aspiration.
>
> **Reference:** Evidence of Dr. Milroy, 21/11/2007, p. 30, line 22 to p. 31, line 9

278. This inability to conceive of an innocent explanation for a set of injuries was something Dr. Smith struggled with in a number of cases. For example, in the Dustin case, Dr. Smith was asked if he ever had any doubt about whether Dustin's injury was non-accidental and he replied:

> If you read my report carefully, you'll see I've left the door open a crack and that is that I'm not aware of the credible explanation for his injury, but, and thus, *in the absence of a credible explanation*, it's my opinion that it's non-accidental, but that it's not a conclusion that was reached at the beginning.
>
> **Reference:** Dr. Smith's Preliminary Hearing Evidence in Dustin, PFP048194, at p. 123

279. Likewise, in the Tiffani case, Dr. Smith stated in his post mortem report: "of note are the presence of bilateral, healing rib fractures which, in the absence of an adequate explanation, are considered to be non-accidental in nature."

> **Reference:** Report of Post Mortem Examination of Dr. Smith, PFP005589, at p. 3

280. In the Tyrell case, Dr. Smith expressed his suspicion regarding the non-accidental nature of the injury as follows:

> …what you need to understand here is that I believe that this is a non-accidental injury. I believe that based on pathology based on epidemiologic studies. However, I have seen enough children die in bizarre accidents that I can accept an accidental explanation and there may be credible accidental explanations. I'm not aware of any.
>
> **Reference:** Dr. Smith's Preliminary Hearing Evidence in Tyrell, PFP105484, at p. 39

281. Moreover, in that case, Dr. Smith agreed that "if somebody provided [him] with some evidential explanation that was credible to [him]", he could accept "forensically, pathologically" that Tyrell's death "could have been caused accidentally."

> **Reference:** Dr. Smith's Preliminary Hearing Evidence in Tyrell, PFP105484, at p. 41

282. It appears that Dr. Smith was not alone in struggling to convey his certainty in circumstances when, based on his experience, there was no innocent explanation for the injuries founded, at post mortem examination. This issue was the subject of considerable discussion with the Directors of the Regional Forensic Pathology Units, the SCAN team members and at the Policy Roundtable on "The Best Practices of Pediatric Forensic Pathology in a Particular Case". Dr. Cordner and Dr. Milroy discussed their approach to these cases, offering a strikingly similar explanation as to how they would testify in these circumstances in Court:

> DR. STEPHEN CORDNER: ..I might say in a particular case, in my opinion because of the number and distribution of injuries in this case, this child has been assaulted. I might even add to that, look, *I can't actually conceive of how this child could have got these injuries in a single simple fall.* And then you might say, Well, that's certainty, for heaven's sake. And then I'd say, Well you know, …but …I may not be able to conceive some things. I may say, You'd probably think – Ah, you're splitting hairs and you just want a little bit of, you know, wiggle room…And – and so I'm not going to say that it's a fact that this child's been assaulted …
>
> COMMISSIONER STEPHEN GOUDGE: But it is important that you say that, is it not?
>
> DR. STEPHEN CORDNER: Well, and there'll be some cases where I might say that. There'll be some cases where I won't say. ..
>
> **Reference:** Dr. Cordner, Policy Round Table, 14/02/2008, p. 101, line 7 to p. 102, line 1 [emphasis added]
>
> …I do use that term, *I cannot conceive of this being any other than,* which is, I suppose giving a great degree of certainty.
>
> **Reference:** Dr. Milroy, Policy Round Table, 14/02/2008, p. 102, lines 15 to 18

See also: Evidence of Dr. Huyer, 09/01/2008, p. 262, line 1 to p. 265, line 18
Evidence of Dr. Shouldice, 09/01/2008, p. 278, line 12 to p. 279, line 8

283. Dr. Pollanen also acknowledged that it is the role of the pathologist to advise both the police and the Crown that certain events are, in fact, rare:

> ...part of informing the Crown and the defence in those types of cases is fairly representing the epidemiology of the scenario…which is that short falls are rare - - rarely lethal. And that's a fact.

Reference: Evidence of Dr. Pollanen, 05/12/2007, p. 56, lines 17 to 25

284. The Commission also heard evidence that Dr. Smith ought not to have speculated about possible causes of death in cases in which he was unable to determine a cause of death. For example, in the Paolo case, Dr. Smith opined that the cause of death was unascertained but then went on, in response to a question from the Crown, to offer two possibilities as to how Paolo may have died, inviting Dr, Crane's criticism as follows:

> Well, I think what Dr. Smith gave in his report was that the cause of death in this case was – was unascertained. Now I - - I think that's the testimony he should have given in court…I think the pathologist should simply say, I don't know, and leave it at that. And I think to put in a number of causes, I think can be confusing to put all of these in; the head injury, the fit, the neck compression, smothering. I think that can be confusion – confusing to the Court.

Reference: Evidence of Dr. Crane, 21/11/2007, p. 63, line 24 to p. 65, line 12

285. However, it appears that Dr. Crane objected to this approach primarily because he did not agree that the diagnoses offered by Dr. Smith were certain enough, and <u>not</u> because Dr. Smith speculated. This fact is demonstrated in the Joshua case, where Dr. Crane himself concluded in his report and would have had no trouble communicating in Court that he believed that there was a "significant possibility" that Joshua died from some form of suffocation in an unsafe sleeping environment, notwithstanding the fact that he would have labeled the cause of death as unascertained:

> DR. JACK CRANE: …There is nothing from the pathological examination that would help me to come to a definitive diagnosis. And, therefore, if I don't know, then I would say that the cause of death is unascertained…I would, however, agree with Dr. Pollanen and in my commentary on the case, I would indicated that there remains a significant possibility that the [cause of death] could have

> been caused by some form of suffocation in an unsafe sleeping environment. Now, I would say that I would put that in my commentary because that's an opinion that I'm giving but, … I can't be sure, I certainly would not give it as - - as a cause of death.
>
> COMMISSIONER STEPHEN GOUDGE: Would you have testified using the phrase "significant possibility?
>
> DR. JACK CRANE: Yes
>
> COMMISSIONER STEPHEN GOUDGE: Do you mean by, "significant possibility," likelier than any other explanation you can offer, based on the pathology?
>
> DR. JACK CRANE: Well, it's not based on the pathology because the pathology hasn't – hasn't shown anything. It's - - it's based on, if you like, the environment and the circumstances where that child was found.
>
> COMMISSIONER STEPHEN GOUDGE: I am puzzled by how that would be understood by the lay listener? – Do you think there is any risk that that phrase would be understood to carry more certainty with it than you intended?
>
> DR. JACK CRANE: Well, I would hope not, because I would still be giving the cause of death as being "unascertained".
>
> **Reference:** Evidence of Dr. Crane, 19/11/2007, p. 245, line 13 to p. 248, line 7

286. It seems somewhat ironic that Dr. Crane, by stating the cause of death to be 'unascertained', believed he could safely speculate on Joshua's possible cause of death but Dr. Smith was apparently in error for doing the same in the Paolo case under direct questioning from the Crown.

> **Reference:** See Section 8.04

287. Likewise, in the Tamara case, Dr. Milroy stated that the cause of death ought to have been labeled as "unascertained" although he made it clear that the "upper airway obstruction with aspiration is the likely cause of death in this case". When asked to explain how he would articulate this possibility, Dr. Milroy indicated that when speaking with the police, he would tell them that the death was "highly suspicious" and in communicating with the jury, he would indicate that there was a "strong possibility of upper airway obstruction", which, according to Dr. Milroy, is admittedly "pretty much the same thing".

> **Reference:** Evidence of Dr. Milroy, 21/11/2007, p. 200, line 15 to p. 205, line 6

288. No doubt one of the distinctions between the Joshua and Tamara cases on the one hand and the Paolo case on the other was level of certainty. Drs. Milroy and Crane were very certain of their opinions in the Tamara and Joshua cases, whereas Dr. Smith expressed less certainty as to the possible causes of death that he articulated in the Paolo case.

289. Indeed, in the Paolo case, Dr. Smith readily acknowledges that his possible explanations were not at all certain and in fact, there were good reasons to dispute them. For example, he admitted that Dr. Chan's recording of the brain weight was suspect and if inaccurate, that there was no evidence that Paolo died of a head injury. Likewise, he acknowledged that it was a "real possibility" that the haemorrhage in the neck was, in fact, an artefact and as such, the possibility of death by neck compression could be challenged.

Reference: See Section 8.04

290. As will no doubt be absolutely clear to this Commission, the choice of language to convey degrees of certainty in a science that is inherently uncertain was and remains a challenge for all pathologists. Dr. Smith's testimony must be analyzed more leniently in recognition of this problem and the culture within which he was practicing in the 1980s and 1990s.

4.04 ACCEPTANCE BY COURT OF PATHOLOGY OPINION

291. Not only was the culture of giving expert testimony less careful than it perhaps ought to have been in pediatric forensic pathology in the 1980s and 1990s, but counsel and the Bench appear to have been insufficiently diligent in limiting the evidence of these experts.

292. The potentially problematic combination of experience-based pathology, and insufficiently interventionist counsel and judges was aptly described by Dr. Gruspier in "Pediatric Pathology as Forensic Science: The Role of Science and the Justice System":

> Aside from the fact that *Marquard* appears to allow a very broad scope of expert opinion, if it is limited, there is a real danger that any limiting instruction given by the judge to a jury may not be fully heeded. This is enhanced by the sheer abundance of numerous medical experts giving absolute opinions on a cause of death, and by the fact that these experts are easily led to opine further than they should. Because they are not forensically trained and experienced, they are therefore not aware of the true limits of their testimony. A lack of forensic training and experience, often coupled with active advocacy, or an over-endowed sense that they are doing the "right thing", allows these experts to be easily led down the hypothetical path by counsel. In my opinion, the courts must begin to either limit the number of experts who opine in these cases, or very clearly outline the boundaries of what they will be allowed to testify to. Defence counsel should, when possible, object when an expert opines outside of their area of expertise, and perhaps the judge should intervene even if the defence does not object. The ex post *Marquard* remedy of giving such statements limited weight, in the rare occasion where it is applied, does not appear to be effective. Indeed, the court may want to revisit this part of *Marquard* as well as enforce other decisions that take a stricter approach to prejudicial evidence of limited probative value, or expert evidence on issues of credibility, or expert opinions that are very close to addressing the ultimate issue.
>
> **Reference:** K.L. Gruspier, "Pediatric Forensic Pathology as Forensic Science", PFP175420, at p. 72

293. The Crown, the defence and the Court all have important roles in the proper administration of the criminal justice system and those roles must be carefully examined to fairly appreciate the systemic issues raised in relation to pediatric forensic pathology.

4.04(1) Crown Lawyers Extending Evidence Beyond Areas of Expertise

294. It is abundantly clear that medical experts are routinely asked by the Crown to provide opinions outside their area of expertise.

295. Dr. Smith gave evidence that it did not occur to him that if he was asked a question in Court, he could decline to answer. He believed that if the question was asked, and not objected to by either the Court or any lawyer, he was obliged to answer it. Although in retrospect he recognizes that he did not understand the justice system as well as he thought he did, it appears that he placed far too much confidence in the judgment of the lawyers when he was testifying in Court in terms of appreciating the proper nature and scope of his testimony.

> **Reference:** Dr. Smith's Written Evidence, PFP303346, at pp. 66 and 80

296. Authors Campbell and Walker suggest that this ignorance is not unique to Dr. Smith:

> …It has been noted that doctors are not sufficiently trained in understanding the differences between the courts, nor do they understand the scientific foundation needed for expert testimony.
>
> **Reference:** Campbell & Walker, Medical Mistakes and Miscarriages of Justice, PFP149652, at p. 6

297. According to Dr. Butt, pathologists frequently get "shoe-horned" into answering clinical questions in the culture of the Court.

> **Reference:** Evidence of Dr. Butt, 22/11/2007, p. 153, line 23 to p. 154, line 1

298. Indeed, according to Dr. Butt, it is not the role of the expert to make clear his expertise, it is the role of counsel:

> MR. JIM HARUANEY: So, it wouldn't be up to the expert to say what his field was and what his experience is in. It would be up to counsel, I guess, to kind of flush that out?
>
> DR. JOHN BUTT: I think that's correct.
>
> **Reference:** Evidence of Dr. Butt, 23/11/2007, p. 40, lines 10 to 14

299. Drs. Rao, Shkrum and Dexter all acknowledged that pathologists with less experience might feel pressure to provide opinions beyond their expertise, if asked. It is not unreasonable to believe that that same pathologist could easily find himself trying to be helpful by agreeing to propositions put to them in chief such as whether a particular set of findings was "consistent with" a non-accidental mechanism of death.

> **Reference:** Evidence of Drs. Rao, Shkrum and Dexter, 18/01/2008, p. 66, line 19 to p. 67, line 16

300. Dr. Huyer and Dr. Shouldice confirmed they frequently experience this phenomenon and that when repeatedly asked a question, it is difficult to resist answering the question:

> When I go to court I answer the questions that are asked of me . . . so if I'm asked the question I'm going to answer the question.
>
> **Reference:** Evidence of Dr. Huyer, 10/01/2008, p. 58, lines 18 to 21
>
> **See also**: Evidence of Dr. Huyer, 10/01/2008, p. 230, lines 12 to 24
> Evidence of Dr. Shouldice, 10/01/2008, p. 227, line 20 to p. 228, line 17

Dr. Ranson, Policy Roundtable, 15/02/2008, p. 42, line 7 to p. 43, line 20

301. It is abundantly clear that in some of the instances in which Dr. Smith has been criticized for offering testimony outside his area of expertise or misleading the Court, he was invited to do so by the lawyers who were questioning him.

302. For example, in the Joshua case, Crown counsel asked the following questions of Dr. Smith regarding his cause of death:

> Q. And what was the cause of death with respect to the infant, Doctor Smith?
>
> A. Yes. In my report, I have attributed Joshua's death to asphyxia.
>
> Q. Thank you. Is asphyxia consistent with suffocation, Doctor Smith?
>
> A. Well, suffocation is one form of asphyxia. Asphyxia is more a generic term which, which incorporates both impaired supply and or impaired utilization of oxygen by the tissues in the body of which suffocation is simply one mechanism.
>
> Q. The, were your post mortem findings consistent with the infant being suffocated or smothered by someone else?
>
> A. Yes.
>
> **Reference:** Dr. Smith's Preliminary Hearing Evidence, PFP0626008, at p. 6

303. Moreover, after Dr. Smith testified that there are unusual situations in which a child of Joshua's age could "suffocate himself", including being placed in a "dangerous situation", Dr. Smith was not asked by the Crown about Joshua's sleeping environment and whether it could have constituted an unsafe sleeping environment.

Reference: *Ibid*

304. In the Paolo case, Dr. Smith gave a diagnosis that the cause of death was unascertained but then was asked by the Crown to testify on "what may have happened to Paolo", inviting him to offer various possibilities that arise from the findings on autopsy.

Reference: Dr. Smith's Trial Evidence, PFP017346, at p. 158

305. In the Tamara case, Dr. Smith was asked to comment on a blood stain on a shirt:

> Q. I've taken what appears to be, it's obviously a t-shirt, from a bag … Does that seem like too much blood, too little blood, the right amount of blood or can you say?
>
> A. Well – and understand there, I'm not – I'm not a blood stain expert, so – so I –
>
> Q. Understood
>
> A. I will give you my best answer
>
> Q. Thank you.
>
> A. But understand – understand the limits here …
>
> **Reference:** Dr. Smith's Preliminary Hearing Evidence, PFP071289, at p. 67

306. There are also several examples of the Crown making the decision not to call more appropriate experts to support the case against the accused, instead relying on Dr. Smith to act as a "one man fits all" expert.

307. Indeed, Dr. Huyer testified that there was a policy change in 1999, such that clinical opinions about the nature of injuries sustained in life were thereafter routinely obtained from clinicians rather than relying on pathologists to provide those opinions, as was done prior to that time.

> **Reference:** Evidence of Dr. Huyer, 09/01/2008, p. 161, line 8 to p. 162, line 20
> Evidence of Dr. Huyer, 10/01/2008, p. 196, line 15 to p. 197, line 25

308. As a further example, it remains unclear why the Crown elected not to call Dr. Robert Wood at the preliminary hearing into charges against Louise Reynolds to address the defence theory that Sharon was killed by a dog. Dr. Wood, an odontologist, was clearly more qualified than a pediatric pathologist to opine on potential bite marks. Moreover, Dr. Wood had rendered a written opinion two months prior to the preliminary hearing that was unequivocal in rejecting the dog bite theory. And yet, the Crown relied exclusively on Dr. Smith's evidence to counter the theory of the dog attack, even though Dr. Smith admitted in his preliminary hearing testimony that he had seen very

few dog attack cases, and these were some fifteen to twenty years before Sharon's post mortem examination.

Reference: See Section 8.02

309. Similarly, in the Jenna case, Dr. Smith advised the Coroner and the Crown that a clinical opinion should be obtained from a pediatric surgeon to co-relate Jenna's injuries and her presentation during the last 24 hours of her life. Inexplicably, the Crown waited until after the preliminary hearing to consult such an expert, only doing so after the defence proffered an opinion from Dr. Ein.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 59

310. No doubt these Crown decisions can be explained by the fact that Dr. Smith was testifying at a preliminary hearing, at which typically the Crown leads just enough evidence to satisfy the threshold to have the accused committed for trial. Nonetheless, Dr. Smith was used in circumstances where it should have been obvious that another expert might have been better placed to provide assistance to the Court. As an example, in the Kenneth case, the Crown did not call a pediatric neurologist or Kenneth's ICU physician at the preliminary hearing but did so at trial.

Reference: See Sections 7.09(3) and (4)

4.04(2) Defence Lawyers Acquiescing

4.04(2)(a) Guilty Pleas Prior to Preliminary Hearing

311. In three of the nineteen cases, the accused pleaded guilty to a lesser charge prior to the preliminary hearing. In some cases, the defence counsel had retained a pathologist to review the case.

312. In the Baby M case, the defence consulted Dr. Jaffe who did not dispute Dr. Smith's conclusion that the infant breathed for at least several minutes. Baby M's mother pleaded guilty to manslaughter.

Reference: Report of Dr. Jaffe, PFP001743, at p. 1

313. In the Gaurov case, the defence consulted Dr. Pinsloo who opined that the evidence demonstrating shaken baby syndrome was "overwhelming". Gaurov's father pleaded guilty to criminal negligence causing death.

Reference: Direction, PFP174470, at p. 2

314. In the Baby F case, Baby F's mother pleaded guilty to infanticide prior to the preliminary hearing despite being advised by her defence counsel to retain an expert to provide an opinion on whether Baby F was born alive.

Reference: Instructions to Lawyer, PFP304373, at p. 2

4.04(2)(b) No Defence Pathologist Called, at Preliminary

315. In the ten cases in which Dr. Smith's preliminary hearing testimony was considered, no defence pathologist was called.

316. Dr. Pollanen attributes this to an unwillingness on the part of pathologists to publically challenge colleagues in a small community of experts:

> …you will find pathologists that will do defence aut - - defence work on the condition that they don't testify. And that's an interesting one where the defence pathologist essentially is happy to provide a review of the papers, provide questions for cross examination, maybe take on an educational role, but they're unwilling to appear as a witness, and that's probably the most common use of defence pathology in the Province.

Reference: Evidence of Dr. Pollanen, 05/12/2007, p. 206, lines 17 to 25

See also: Pollanen, "Systemic Issues", PFP301189 at p. 12

317. However, the decision not to call pathologists, at preliminary hearings is likely as much, if not more, a reflection of the defence culture of not leading any evidence at a preliminary hearing. Just as the Crown may elect to call as little evidence as necessary to satisfy the threshold to have any accused committed for trial, so too the Defence elects not to lead any evidence that might reveal the defence strategy in advance of trial, and indeed might curtail their cross-examination of Crown witnesses for the same reason.

318. The record supports the fact that in several cases, the defence counsel had opinions from pathologists but the defence counsel did not call that pathologist to give evidence at the preliminary hearing.

319. In the Joshua case, Mr. Hillyer had consulted with Dr. Jaffe but did not call him at the preliminary hearing.

Reference: Letter from Dr. Jaffe to Bruce Hillyer, PFP008642
Memos to File from Bruce Hillyer, PFP174366, PFP174353, PFP174343 and PFP174312

320. In the Kenneth case, Kenneth's mother's defence counsel, Steve Clark had consulted with Dr. Rao but did not call her at the preliminary hearing.

Reference: Memos to File, PFP304369 and PFP304362

321. In the Tiffani case, it appears the defence may have retained Dr. King, but he did not testify at the preliminary hearing and, in fact, Dr. Smith was not even cross-examined by defence counsel.

Reference: Letter from Sheila Walsh to Dr. Smith, PFP005580

322. In the Taylor case, it appears that the defence retained Dr. Deck, a neuropathologist, but it does not appear that he was called to give evidence at the preliminary hearing.

Reference: Report of Neuropathologic Consultation, PFP009729
Judgment of Kozak, J. PFP009639

323. Notwithstanding the widespread practice not to call witnesses for the defence at a preliminary hearing, the Commission should consider whether this practice contributed to the challenges in some of the cases under dispute. The incidental assistance that the defence might gain from disclosing pathology opinions prior to the preliminary hearing was discussed by C. Sherrin in "Defending a Pediatric Death Case":

> …Interestingly, the call for defence disclosure of expert evidence is almost never made on the ground that it will help the defence…However, intuitively, it would seem that disclosure could be beneficial for the defence if it led to pre-trial discussions between the opposing experts that clarified and perhaps narrowed the areas of disagreement. This could help defence counsel not only understand the issues in dispute but also focus her cross examination.

Reference: C. Sherrin, "Defending a Pediatric Death Case", PFP170358, at pp. 55-56

324. However, it should be noted, as acknowledged by Dr. Pollanen, that in some of the cases under review, calling a defence pathologist would not have assisted the defence at all because these consultants offered similar opinions to Dr. Smith, raising the question as to whether these opinions were reflective of the standard of knowledge at the time, and not simply evidence of Dr. Smith's inadequacies:

> And that is consultation with other experts and other pathologists is a healthy, good practice that should be encouraged. But in the end, if many people have made the same mistake or fallen into the same pitfall, you will just basically get an echo chamber where people are repeating the same error.

Reference: Evidence of Dr. Pollanen, 05/12/2007, p. 85, lines 3 to 9

325. For example, in the Valin case, Drs. Jaffe and Ferris, both experts for the defence misinterpreted typical post mortem ano-genital findings. For example, both opined, like Dr. Smith, that the anus was abnormally dilated:

> The gaping here is [in the anus was] perhaps a little [bit] more than one would expect simply by post mortem relaxation.

Reference: Trial Evidence of Dr. Jaffe, PFP037014, at p. 175-176

> Dilatation of the vaginal and anal orifices at postmortem must be done with extreme caution since the sphincter muscles around theses openings often dilate after death. Nevertheless, there does appear to be evidence to suggest repeated penetration of the anus and probably the vagina before death.
>
> **Reference:** Opinion of Dr. Ferris, PFP036150, at p. 5

326. Similarly, Dr. Ferris, like Dr. Smith, saw a rectal laceration in the histologic slide of the rectum, which has subsequently been said not to exist by the external reviewers:

> The rectal laceration seen [miscroscopically] can be interpreted as evidence of anal penetration [8-18 hours prior to death].
>
> **Reference:** Trial Evidence of Dr. Ferris, PFP037225, at p. 55

327. No less significantly, Dr. Ferris opined that the external and internal bruising to the neck, sustained at or around the time of death, taken in conjunction with facial hemorrhages "[could] be reasonably interpreted as evidence of manual strangulation". Dr. Jaffe, like Dr. Smith, acknowledged that he could not exclude manual strangulation as the cause of death. All are now said to have misinterpreted post mortem lividity to be forensically significant haemorrhage and bruising.

> **Reference:** Opinion of Dr. Ferris, PFP036150, at p. 5
> Trial Evidence of Dr. Jaffe, PFP037014, at pp. 168-196, lines 200 to 201

328. In the Joshua case, Dr. Jaffe, like Dr. Smith, opined that the abnormality seen in the histological section of the skull was not a developing cranial suture but a healing skull fracture. It appears that he too was unaware at the time that healing skull fractures and developing cranial sutures can appear strikingly similar.

> **Reference:** Memorandum to File of Bruce Hillyer, PFP174312, at p. 5

329. It appears that the defence pathologists who differed with Dr. Smith (but refused or were not asked to testify) and the defence pathologists who concurred with Dr. Smith all played a role in Dr. Smith's opinion being largely unchallenged at these preliminary hearings.

4.04(2)(c) No Objections to Pathology Evidence

330. It is also abundantly clear from the transcripts of Dr. Smith's testimony in many of the nineteen cases under review that the testimony, which is now described as "obviously" inappropriate, was not objected to by the defence lawyers.

331. John Struthers, an experienced defence counsel, acknowledged that he intentionally allowed Dr. Smith to testify outside his area of expertise at Maureen [redacted]'s preliminary hearing and did not aggressively cross examine Dr. Smith on the strength of his opinions:

> MR. MARK SANDLER: So I take from your answer three (3) components. The first is that unlike the approach that you might have taken at a trial, here you were going to let him delve into areas that you might have felt were beyond his expertise?
>
> MR. JOHN STRUTHERS: Absolutely
>
> MR. MARK SANDLER: Second of all, you were going to pin him down or flesh out what he had to say on the issues that arguably were within his expertise?
>
> MR. JOHN STRUTHERS: Yes.
>
> **Reference:** Evidence of Mr. Struthers, 08/02/2008, p. 83, line 24 to p. 84, line 9

332. This appears to have been the approach recommended by some pathologists who consulted for the defence. For example, Dr. Jaffe advised Mr. Hillyer who defended Joshua's mother, that he ought to simply allow Dr. Smith to testify at the preliminary hearing without any aggressive cross examination:

> I think that during the Preliminary Hearing the defence should 'take in' rather than 'give out'. Dr. Smith cannot do you any harm, in fact, the more he says about the possible mechanism of death in this case, the more vulnerable will he be at the trial.
>
> **Reference:** Letter from Dr. Jaffe to Bruce Hillyer, PPF008642, at p. 2

333. Indeed, in some instances, defence counsel seem to have encouraged Dr. Smith to extend beyond his area of expertise. For example, in the Jenna case, Dr. Smith was invited by the defence counsel at the preliminary hearing to co-relate Jenna's injuries with her behaviour in the 24 hours preceding her death:

> Q. So, I take it then, doctor, what we have to look at is perhaps the child's behaviour? If we're not able to believe one person or another person as to what the history of this child was over the last twenty-four hours as far as what they may have done or may not have done, the next best thing, I take it, would be the child and how she reacted over that period of time, is that fair?
>
> A. Yeah…If you have good observations of that, that can help - yeah.
>
> Q. And so, if we have observations that the child was generally happy and played around, etc. in the afternoon, would that tend to lead to an opinion that maybe the injury occurred after that period of time?
>
> A. Well, yeah, it – it could have occurred afterwards – after this type of an injury you can get, you know, a honeymoon period unlike something like head injury where, once a lethal head injury occurs, you're no longer normal – the literature would suggest that in fact, with blunt abdominal injury, you get a honeymoon period where an infant appears essentially normal but as – as the abnormalities continue in their process – be it, you know, leakage of bile or leakage of enzymes or whatever, then symptoms will certainly kick in. My hunch is that she probably had some initial symptoms from the injury if it was a single event. She may well have had a period of time when she, you know, appeared normal or near normal – you know, obviously internally she's not normal but she may have appeared normal – no, she may not have had this honeymoon period. She may have been injured and never been normal from that point forward but she could have had a honeymoon period.
>
> **Reference:** Dr. Smith's Preliminary Hearing Evidence, PFP074658, at pp. 117-118.

334. While there are obvious strategic factors that go into a decision whether or not to reveal a defence strategy at the time of the preliminary hearing through cross examination, this adversarial approach to pathology evidence was clearly a contributing factor in the way in which Dr. Smith's evidence was tendered at preliminary hearings. The Crown took no steps to confine or weaken the strength of his opinion. The Defence did not challenge Dr. Smith. In result, Dr. Smith became used to giving one-sided evidence which was not typically challenged by the defence.

335. In any event, in light of the defence approach to pathology evidence at preliminary hearings, it is inappropriate to suggest that Dr. Smith's evidence was critical in decisions made by accused persons to plead guilty. Clearly, a defence lawyer who chooses not to challenge Dr. Smith cannot then suggest that Dr. Smith's evidence was so compelling that the accused was forced to plea!

4.04(2)(d) No Defence Pathologist Called at Trial

336. Of the four cases that proceeded to trial, the defence called pathologists in only half of the cases.

337. In the Paolo case, Dr. Smith's opinion was that the cause of death was undetermined. It is apparent from the case materials that the defence felt it could argue the Crown had not established causation based on Dr. Smith's evidence.

Reference: See Section 8.04

338. In the Kenneth case, not only had the defence retained Dr. Rao prior to the preliminary hearing, but also Dr. Jaffe was present in the courtroom during Dr. Smith's testimony at the trial. The defence called only Kenneth's mother in the defence case and did not call Dr. Jaffe (or any other defence pathologist to testify).

Reference: Trial Transcript, PFP063336, at p. 93

339. As such, while it no doubt is a common practice for defence counsel not to call evidence at a preliminary hearing, it is interesting to note that in some cases, the same decision was taken at the trial.

4.04(3) Court Not Limiting Expert Testimony

340. Finally, when assessing the quality of Dr. Smith's evidence, one has to, however reluctantly, note that the Court failed to enforce the proper limits of expert testimony. In "Pediatric Forensic Pathology as Forensic Science", Dr. Gruspier commented on the wide scope that expert medical testimony has historically been given in the Courts:

> It seems that even if an expert, particularly a medical expert, is not qualified in a specific area of medicine, if he or she has had some passing acquaintance with it, and opines upon it, his or her opinion will be allowed, and if any issue is raised, it will only go to weight. If the expert opines outside of the area of expertise, then the court may decide that the expert was qualified too narrowly and allow the opinion in any case. There does not appear to be many remedies available to control the testimony of an expert at present.

Reference: K.L. Gruspier, "Pediatric Forensic Pathology as Forensic Science", PFP175420, at p. 12

341. An example of the Court properly exercising its inherent jurisdiction to reject expert testimony can be found in the Dustin case. In that case, Dr. Smith was asked for his opinion on whether there is a "profile" of someone who would shake a baby to death. Dr. Smith acknowledged that his opinions on the profile of a person who would normally carry out a certain crime against an infant or child were not based on any profound or intimate knowledge of psychiatry. However, he offered to describe "socially the type of situation wherein non-accidental injury is more likely to have occurred".

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP048194, at p. 120

342. Justice Hunter, the judge presiding at the preliminary hearing, did not allow Dr. Smith to testify on the profile of a person who would inflict this type of injury:

> Q. How come it's brought up to you so often? Isn't it brought up to you on quite a frequent basis in Court whether you've done such a study?
>
> A. I've been asked to describe it. Sometimes judges allow it in and sometimes they don't.
>
> COURT: I'm one of the ones that don't. The doctor is a pathologist whose opinion is based on the physical findings and I don't want him to conjecture about experimental matters of psychiatric or psychiatric profile when it's outside his admitted area of expertise. It's of limited value to me, although it might be quite well founded.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP048194, at p. 122

343. In the Kenneth case, Mr. Justice McIsaac cautioned Dr. Shemie, Kenneth's ICU physician about the use of the term suspicious to describe Kenneth's death and instead counseled him to use the terms "consistency" and "inconsistency".

Reference: Trial Evidence of Dr. Shemie, PFP006144, at pp. 9 - 10

344. As stated by the Honourable Mr. Justice Lesage at the Policy Roundtable:

> I believe the judge must be absolutely clear, satisfied, the area of - - the specific narrow area about which this person is going to be permitted to give an opinion. And I think that counsel, when they call the expert, and as they are introducing the expert, say in clear unequivocal language, exactly what it is … And it should be concise and precise.
>
> …

> [A]nd if they stray, I think you, as the judge, even a non-interventionist judge, you have an absolute obligation to step in and stop the person immediately in their tracks.
>
> **Reference:** Justice Patrick Lesage, Policy Roundtable, 22/02/2008, p. 23, line 17 to p. 25, line 8

345. Unfortunately, there is a dearth of examples of such action on the part of the Court in the cases that proceeded to preliminary hearings or trials. No doubt, in circumstances of a preliminary hearing, the Court may accommodate the defence strategy to obtain as much evidence as possible from the witnesses to enable more effective cross examinations at trial. Nonetheless, if one is to criticize Dr. Smith for failing to acknowledge the limits of his own expertise at a preliminary hearing, one should also note the role of the Court in not ensuring that experts play the role expected of them.

346. Professor Edmond bluntly urges the Court to accept its responsibility in the acceptance of prejudicial or erroneous forensic opinions in his paper, "Pathological Science? Demonstrable Reliability and Expert Forensic Pathology Evidence":

> Historically, appellate judges and commissioners have been eager to cast responsibility for wrongful convictions on police, investigators, forensic scientists, and (to a certain extent) prosecutors and defence counsel, and to absolve the performances of trial judges, and earlier and differently constituted appellate courts. Judges cannot, however, shift the entire responsibility for problems with the forensic sciences because these sciences and technologies have grown up around the courts and have been condoned or sanctioned by them. To blame forensic science and medicine for wrongful convictions trivializes the constitutive role of trial and appellate courts in the recognition and admission of questionable and unreliable forms of incriminating expert evidence (and sometimes the exclusion of defence expert evidence) and the affirmation of convictions. Approaching institutionalized forensic medicine and the forensic sciences as law-science hybrids implicates the judiciary in the production, admission, use, and review of expert forensic evidence.
>
> **Reference:** G. Edmond, "Pathological Science? Demonstrable Reliability and Expert Forensic Pathology Evidence", PFP170096, at pp. 16-17

347. Dr. Huyer expressed a similar sentiment:

> So not only is it the witness's responsibility, in my opinion it's also the judge, defence counsel, and Crown attorney, as to what evidence is put forward before the jury.
>
> **Reference:** Evidence of Dr. Huyer, 10/01/2008, p. 62, lines 16 to 19

See also: Evidence of Dr. Shouldice, 10/01/2008, p. 227, line 20 to p. 228, line 17

4.05 ADVERSARIAL NATURE OF THE SYSTEM CAUSED PROBLEMS FOR PATHOLOGISTS

348. Dr. Smith stated frankly that he "hated" going to Court to testify in criminally suspicious cases. He often felt like a pawn for the Crown counsel in the adversarial fight with the defence.

Reference: Evidence of Dr. Smith, 31/01/2008, p. 20, lines 8 to 18

349. This fact may have appeared surprising to lawyers and the public but other pathologists likely would acknowledge that his sentiment was reflective of their own experiences. For instance, Dr. Rao indicated she no longer does defence work in Toronto because of one bad experience with a Toronto Crown.

Reference: Evidence of Dr. Rao, 17/01/2008, p. 220, lines 14 to 23

350. Indeed, it was acknowledged by other witnesses that the justice system is "very adversarial", that pathologists struggle to "walk the fine line and not be drawn into advocacy" and that under cross-examination it is natural for experts to defend their opinion.

Reference: Evidence of Dr. Butt, 20/11/2007, p. 66, lines 6 to 15
Evidence of Dr. Pollanen, 05/12/2007, p. 196, lines 14 to 23
Evidence of Dr. Shouldice, 09/01/2008, p. 233, line 17 to p. 235, line 3

351. Dr. Taylor described the pressure he has felt to "go one way or another" and reduce issues "black and white" when they are really gray.

Reference: Evidence of Dr. Taylor, 19/12/2007, p. 45, line 9 to p. 46, line 20

352. This same pressure reduces the likelihood of defence and crown pathologists discussing their opinions in advance of testimony:

> How often do pathologists get together to discuss their findings when one (1) is on one (1) side and one (1) on the other? I don't think very often.

Reference: Evidence of Dr. Butt, 20/11/2007, p. 67, lines 7 to 9

353. It may also explain why most pathologists wait until they are asked by counsel to admit evidence that is less favourable to the side for whom they are testifying.

Reference: C. Sherrin, "Defending a Pediatric Death Case", PFP170358, at p. 47

354. Dr. Smith's notion that he was working for the Crown is not unique to him. The phenomenon was described by Bruce MacFarlane as follows:

> The hydraulic pressure of public opinion and media commentaries to charge swiftly and then secure a conviction, arise in all jurisdictions...It also caused scientists working in government-operated laboratories to feel aligned with the prosecution, resulting in a perception that their function was to support the theory of the police rather than to provide an impartial, scientifically based analysis. They had, as was later found by the courts, become partisan.

Reference: B. MacFarlane, "Wrongful Convictions", PFP175326, at p. 14

355. In sum, the pathology expert testifies in a highly adversarial context in which the Crown pushes the boundaries of his evidence, the defence fails to cross examine and the Court often remains silent. It is not surprising that, in this context, Dr. Smith may not have appreciated that his evidence was viewed as problematic in any respect.

PART 5 - INSTITUTIONAL ARRANGEMENTS AND OVERSIGHT IN ONTARIO

356. The culture of pediatric forensic pathology in Ontario did not develop in a vacuum – it was nurtured by the institutions involved in coroner's work and the systems developed by them for oversight of the work of fee-for-service pathologists.

357. From the perspective of a pediatric forensic pathologist practicing in the 1980s and 1990s, there was little, if any, guidance as to how to approach a criminally suspicious death and little opportunity for errors and omissions to be discovered before the work was presented in the context of a criminal prosecution.

5.01 LEGISLATIVE FRAMEWORK INADEQUATE

358. Surprisingly, *The Coroners Act*, R.S.O. 1990 c.C.37 (the "*Act*") makes no reference to pathologists, let alone forensic pathologists or the CFP.

Reference: *The Coroners Act*, R.S.O. 1990 cC.37
Dr. Michael Pollanen, Policy Roundtable, 11/02/2008, p. 195, line 23 to p. 197, line 11

359. Instead, the only reference to the role of such individuals in the Coroner's system is found in section 28 of the *Act*. Coroners may issue a warrant for a post mortem examination of the body and the person performing that post mortem examination shall report the findings to various individuals including the coroner who issued the warrant.

360. It appears that one need not even be a pathologist to perform a post mortem examination in Ontario.

361. Until 1999,[2] the Regulations made pursuant to the *Act* also stipulated the form to be completed by the individual conducting the post mortem examination. But, neither the *Act* nor the regulations provided guidance on:

(a) The role of the pathologist in the death investigation;

(b) The role the pathologist in any subsequent criminal proceeding; or

(c) The role of the pathologist in any related proceedings (CAS proceedings, civil proceedings).

362. Further, the *Act* does not indicate who, if anyone, is responsible to oversee the work of the individual conducting post mortem examinations pursuant to section 28 of the *Act*.

5.02 LIMITED GUIDELINES AND PROTOCOLS FOR FORENSIC PATHOLOGISTS

363. The OPFPU was created at HSC in 1991.

Reference: Agreement between Ontario and HSC, PFP117722, at p. 1

364. The Agreement establishing OPFPU provided that the Ministry of the Solicitor General would provide partial funding to HSC to operate OPFPU and, in return, the Pathology Department at HSC would perform certain autopsies for OCCO on a fee-for-service basis.

Reference: Agreement between Ontario and HSC, PFP117722, at pp. 2 and 7

365. The evidence before the Commission reveals that at the time of the creation of OPFPU and until 1993, there were no guidelines in place governing the investigation of pediatric deaths.

[2] In 1999, O/Reg. 259/99 revoked the autopsy form ("Form 14") formerly prescribed by the Regulations. Additions to the Regulations effected in the same year by O/Reg. 264/99 did not replace the form.

366. In 1993, Memorandum #616 was issued in respect of investigation of apparent cases of SIDS. This Memorandum required "a thorough and complete autopsy" but other than requiring total body x-rays, no guidance was provided on what constituted a thorough and complete autopsy.

Reference: Coroner's Investigation Manual, PFP057584, at pp. 343 - 346

367. On April 10, 1995, Memorandum #631 was issued. For the first time, coroners, police officers and pathologists in Ontario were provided a comprehensive protocol for pediatric death investigations. This protocol included a twelve-page description of a thorough and complete pediatric autopsy, authored by Dr. Smith. While other aspects of Memorandum #631 have been criticized, Dr. Smith's protocol has been acknowledged as comprehensive and appropriate.

Reference: Coroner's Investigation Manual, PFP057584, at p. 349-413
Evidence of Michael Pollanen, 11/12/2007, p. 197, lines 9 to 16
Pollanen, "The Smith Review", PFP032588, at p. 7
Dr. Smith's Written Evidence, PFP303346, at p. 33

368. While Memorandum #631 provided greater guidance to local pathologists unfamiliar with pediatric autopsies, the protocol did not change the practice of any of the pathologists in Ontario who had been regularly conducting pediatric autopsies, including Drs. Carpenter, Shkrum, Rao, Dexter and Smith.

Reference: Evidence of Dr. Carpenter, 20/12/2007, p. 129, lines •
Evidence of Dr. Shkrum, 17/01/2008, p. 175, line 9 to p. 176, line 12
Evidence of Dr. Rao, 17/01/2008, p. 177, line 1 to p. 178, line 8
Evidence of Dr. Dexter, 17/01/2008, p. 178, line 17 to p. 179, line 3
Dr. Smith's Written Evidence, PFP303346, at p. 34
Evidence of Dr. Smith, 28/01/2008, p. 58, line 22 to p. 59, line 4

369. Nor was Memorandum #631 intended to be a complete protocol to the approach pathologists should take to criminally suspicious cases. For example, it did not include any advice to pathologists on the following issues, for which guidance has been provided many years later, if at all:

(a) who was responsible for seizing evidence in criminally suspicious cases;

Reference: Coroner's Investigation Manual, PFP057584, at pp. 268-273 (Memorandum #04-10, Physical Scientific Evidence, July 12, 2004)

(b) who is responsible for documenting seized evidence in criminally suspicious cases;

Reference: Guidelines on Autopsy Practice for Forensic Pathologists, July 2005, PFP033981

(c) who is responsible for submitting seized evidence for analysis in criminally suspicious cases;

Reference: Coroner's Investigation Manual, PFP057584, at p. 197 (Memorandum #03-12, Ensuring timely submission of samples to CFS, September 29, 2003)

(d) what photographs should be taken during the autopsy and by whom;

(e) the circumstances in which a pathologist should testify in any proceedings related to the death;

(f) the manner in which any such testimony should be given;

Reference: Coroner's Investigation Manual, PFP057584, at p. 268-273 (Memorandum #04-10, Physical Scientific Evidence, July 12, 2004)

(g) the pathologist's interactions with police during the course of a death investigation or criminal investigation;

Reference: Coroner's Investigation Manual, PFP057584, at pp. 124-126 (Memorandum #99-02, Forensic Pathology Pitfalls, April 12, 1999) and at pp. 268-273 (Memorandum #04-10, Physical Scientific Evidence, July 12, 2004)

(h) the pathologist's interactions with the investigating coroner during the course of the death investigation, and in particular the proper documentation of such interaction;

(i) the pathologist's interactions with Crown Attorney's prosecuting criminal offences related to the death;

Reference: Coroner's Investigation Manual, PFP057584, at pp. 268-273 (Memorandum #04-10, Physical Scientific Evidence, July 12, 2004)

(j) the pathologist's interactions with Children's Aid Societies;

Reference: Coroner's Investigation Manual, PFP057584, at pp. 442-243 (Memorandum #01-07, Role of OCCO in Cases involving Child Protection Issues, June 28, 2001)

(k) the pathologist's interactions with family members of the deceased;

(l) the pathologist's interactions with defence counsel;

(m) obtaining consultations regarding cause of death from other experts in areas outside the pathologist's expertise;

Reference: Coroner's Investigation Manual, PFP057584, at pp. 124-126 (Memorandum #99-02, Forensic Pathology Pitfalls, April 12, 1999); at p. 140 (Memorandum #01-06, Consultation Reports, June 27, 2001); and at pp. 268-273 (Memorandum #04-10, Physical Scientific Evidence, July 12, 2004)

(n) obtaining consultations from other experts relevant to issues other than cause of death (for instance, timing of injuries or potential causes of injuries);

Reference: Coroner's Investigation Manual, PFP057584, at pp. 141-142 (Memorandum #01-10, Use of Medical Expert Services, November 19, 2001) and at pp. 268-273 (Memorandum #04/10, Physical Scientific Evidence, July 12, 2004)

(o) storage of evidence;

Reference: Coroner's Investigation Manual, PFP057584, at pp. 268-273 (Memorandum #04/10, Physical Scientific Evidence, July 12, 2004)

(p) compensation for participation in case conferences arising from the pathologist's involvement in death investigations;

(q) disclosure of materials in the possession of pathologists to the defence;

Reference: Coroner's Investigation Manual, PFP057584, at pp. 268-273 (Memorandum #04/10, Physical Scientific Evidence, July 12, 2004), and Guidelines on autopsy practice for forensic pathologists, July 2005, PFP033981

(r) timelines for completion of post mortem examination reports; and

Reference: Coroner's Investigation Manual, PFP057584, at p. 231 (Memorandum #04-13, Completion of Autopsy Reports, July 23, 2004)

(s) Involvement of residents in autopsies in criminally suspicious circumstances.

Reference: Coroner's Investigation Manual, PFP057584, at pp. 169-170 (Memorandum #03-03, Post-Graduate Trainees in Coroner's Autopsies, February 17, 2003)

370. Similarly, HSC had no formal policies on:

(a) who was responsible for seizing evidence in criminally suspicious cases;

(b) who was responsible for documenting seized evidence in criminally suspicious cases;

(c) who was responsible for submitting seized evidence for analysis in criminally suspicious cases;

(d) storage of evidence;

(e) entitlement of a pathologist to the fee for conducting post mortem examinations;

(f) the division of a pathologist's time between coroner's work and HSC work; or

(g) time away from the hospital necessitated by involvement in coroner's cases.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 37
Evidence of Dr. Taylor, 18/12/2007, p. 171, line 13 to p. 172, line 15s

371. Indeed, until recently the Department of Pathology and HSC compartmentalized the performance of coroner's work as it was viewed as independent from the work of HSC. It is accordingly not surprising that HSC assumed no practical oversight role for pathologists doing coroner's work.

Reference: Evidence of Dr. Taylor, 18/12/2007, p. 276, line 15 to p. 277, line 2
Sossin, "Accountability and Oversight of Death Investigations in Ontario", PFP175501, at pp. 49-50
Dr. Smith's Written Evidence, PFP303346, at p. 16

5.03 LACK OF INFORMAL GUIDANCE

372. The absence of any formal guidance provided by the *Act*, OCCO and HSC was coupled with little informal guidance or oversight from OCCO or the CFP throughout the 1980's and 1990's.

5.03(1) Physical Isolation from OCCO

373. As OPFPU was physically segregated from OCCO, there was limited opportunity for regular interaction between the pediatric pathologists working at OPFPU and the forensic pathologists working at the Toronto Forensic Pathology Unit ("TFPU"), the Chief Coroner or the Deputy Chief Coroners.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 34-35

374. The problem of isolation existed not only for OPFPU, but also for other Regional Units and indeed, has been identified in other countries as a source for concern.

Reference: Evidence of Drs. Rao, Shkrum and Dexter, 18/01/2008, p. 143, line 21 to 144, line 24
Moles & Sangha, "Comparative Experience with Pediatric Pathology and Miscarriages of Justice: South Australia", PFP170167, at pp. 34-35

375. Dr. Lucas testified that systemic quality control is impacted by the proximity (or, as the case may be, lack of proximity) of a Regional Supervising Coroner to the location where an autopsy is performed. He described the potential advantages as follows::

> …I was in – I was in St. Catharines for the Niagara region whereas the forensic centre was in Hamilton. Had I stayed in – in Niagara, we would have relocated the office from St. Catharines to Hamilton so that we would have that advantage.
>
> Then, of course, in Toronto I was – had the same opportunity that my two (2) colleagues do now on a daily basis to attend and – and review the cases every morning that have come in to be done, or ones that were done yesterday.
>
> And now I'm back in the periphery in Brampton for – for my area of Peel, York and Durham that I need to travel downtown if I want to be able to have that sort of discussion, and … of course … the disadvantage that I have is that I don't have that immediate quality assurance check that we heard described before the autopsy is done; reviewing the - the warrant for post-mortem examination to make sure that the information available to the pathologist is as comprehensive as it should be[.]

Reference: Evidence of Dr. Lucas, 07/01/2008, p. 289, line 21 to p. 290, line 16

376. Despite the physical proximity of OPFPU to TFPU, it is not at all evident that the pathologists at OPFPU benefitted from the same degree of informal exposure and supervision by forensically-trained professionals as that described by Dr. Lucas.

377. This physical isolation reduced the opportunities for Dr. Smith to benefit from the informal guidance and input from forensic pathologists that could naturally arise through proximity. This lack of interaction significantly reduced his ability to grasp the insight that forensic pathologists could provide in his pediatric cases.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 34-35
Evidence of Dr. Smith, 28/01/2008, p. 42, line 18 to p. 43, line 8

5.03(2) Insufficient Oversight by OCCO/CFP

378. Until the appointment of Dr. Chiasson as CFP, there was essentially no interaction between the CFP and pathologists conducting fee-for-service post mortem examinations.

Reference: Evidence of Dr. Carpenter, 20/12/2007, p. 151, lines 13 to 18
Dr. Smith's Written Evidence, PFP303346, at p. 34
Evidence of Dr. Young, 30/11/2007, p. 27, lines 5 to 10
Evidence of Dr. Cairns, 27/11/2007, p. 214, line 7 to p. 216, line 12

379. Prior to 1995, post mortem reports in all cases were submitted directly to Regional Supervising Coroners. However, it is acknowledged that those Regional Supervising Coroners would have limited ability to provide quality assurance over the work of pathologists. Indeed, both Dr. Young and Dr. Chiasson acknowledged that quality assurance was not a focus of OCCO at all in the early 1990s.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 35-36
Evidence of Dr. Cutz, 18/12/2007, p. 24, lines 12 to 21
Sossin, "Accountability and Oversight of Death Investigations in Ontario", PFP175501, at pp. 57-58
Evidence of Dr. Young, 03/12/2007, p. 260, line 13 to p. 261, line 26
Evidence of Dr. Chiasson, 07/12/2007, p. 133, line 8 to p. 134, line 7

380. Even after Dr. Chiasson was appointed, the direct interaction between him and fee-for-service pathologists was limited, no doubt in part due to the considerable workload of both Dr. Chiasson and the individual pathologists.

Reference: Evidence of Dr. Carpenter, 20/12/2007, p. 152, lines 13 to 25
Dr. Smith's Written Evidence, PFP303346, at pp. 34-35

381. While Dr. Chiasson did review post mortem reports in criminally suspicious cases starting in 1995, this review was largely limited to a paper review and provided insufficient oversight of the work of fee-for-service pathologists.

Reference: Memorandum from Drs. Chiasson and Young, PFP129358
Dr. Smith's Written Evidence, PFP303346, at p. 35
Evidence of Dr. Shkrum, 17/01/2008, p. 288, line 7 to p. 289, line 7

382. Dr. Chiasson also attempted to improve the quality of the pathology in criminally suspicious cases by ensuring such work was done by pathologists with forensic training or more extensive forensic experience. This exercise was, however, focused on weeding out those at the bottom, not analysing the skills of those at the top. Specifically, OCCO emphasized "triaging" certain complex cases to individuals whom it believed to be appropriate experts, but failed to adequately ensure that those "top end" experts were properly qualified and supervised. OCCO simply assumed that those at the "top end" were competent.

Reference: Evidence of Dr. Young, 03/12/2007, p. 65, line 17 to p. 66, line 5.
Evidence of Dr. Chiasson, 07/12/2007, p. 95, line 21 to p 103, line 5

383. Other than Dr. Chiasson's paper review, there was limited other peer review in place. At HSC, homicide cases were rarely discussed at CPC rounds. Forensic rounds were sporadic, falling victim to busy schedules, not only in Toronto, but in other regions. Formalized peer review has only been in place in the regional units since 2004.

Reference: Evidence of Dr. Cutz, 18/12/2007, p. 66, lines 3 to 20
Evidence of Dr. Taylor, 18/12/2007, p. 118, lines 2 to 25
Evidence of Dr. Chiasson, 07/12/2007, p. 151, lines 5 to 12 and p. 191, lines 19 to 24 and 11/12/2007, p. 23, line 19 to p. 24, line 7
Dr. Smith's Written Evidence, PFP303346, at p. 35
Evidence of Dr. Carpenter, 20/12/2007, p. 96, line 22 to 99, line 20
Evidence of Dr. Rao, 17/01/2008, p. 249, line 5 to p. 252, line 22

384. Finally, there was limited formal training for pathologists working for the coroner. The training provided in pediatric forensic pathology was provided by Dr. Smith.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 12
Regional Coroners' Pathologist Course, PFP129374
Regional Coroners' Pathologist Course, PFP129379

385. OCCO appeared to believe that quality assurance would be provided by the defence and experts retained by the defence. With the benefit of hindsight, this assumption was erroneous in some cases.

Reference: Evidence of Dr. Young, 30/11/2007, p. 27, lines 11 to 22
See Section 4.04(2) above

5.03(3) No Direct Reporting to OCCO or CFP

386. In the 1990s, there was no one individual responsible for monitoring the work done by pathologists doing fee-for-service work for OCCO and one person to whom those pathologists reported. The Agreement creating OPFPU did not state to whom pathologists performing fee-for-service post mortem examinations reported.

Reference: Agreement between Ontario and HSC, PFP117722

387. Instead, it appears that each pathologist was responsible to the Investigating or Regional Supervising Coroner involved in investigating individual cases.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 32 and 35

388. Other than the paper review done by Dr. Chiasson, there is no evidence that the fee-for-service pathologists regularly reported to the CFP or the CFP ever reviewed the non-homicide work of these pathologists.

5.03(4) No Clear Role for Director of OPFPU

389. The Agreement creating OPFPU did not specify the role or responsibilities of the Director. The letters resulting in the appointment of Dr. Smith as Director do not provide further insight into the expectations of him as Director.

Reference: Agreement between Ontario and HSC, PFP117722
Letter from Dr. Young to Dr. Phillips, PFP044014
Letter from Dr. Phillips to Dr. Smith, PFP044015
Dr. Smith's Written Evidence, PFP303346, at pp. 15-16

390. The Agreement did not clearly set out to whom the Director reported; instead the nature of the issue would determine the reporting lines. That said, no further guidance was provided as to the sorts of issues that should be reported to the Chief Coroner.

Reference: Agreement between Ontario and HSC, PFP117722
Sossin, "Accountability and Oversight of Death Investigations in Ontario", PFP175501, at p. 49
Evidence of Dr. Young, 03/12/2007, p. 267, lines 13 to 24
Evidence of Dr. Cairns, 26/11/2007, p. 98, line 15 to p. 99, line 2

391. OCCO did not expect that the Director would exercise any quality control over the work of individual pathologists doing fee-for-service work for OCCO, nor did they expect the Chief of Pathology at HSC to do so.

Reference: Evidence of Dr. Young, 30/11/2007, p. 27, lines 24 to 25
Evidence of Dr. Young, 30/11/2007, p. 28, line 22 to p. 29, line 15

392. Instead, OCCO envisioned Dr. Smith's role as Director as purely administrative in nature. Dr. Smith's activities as Director reflect that reality.

Reference: Evidence of Dr. Young, 03/12/2007, p. 38, lines 1 to 21 and
30/11/2007, p. 24, line 25 to p. 25, line 8
Dr. Smith's Written Evidence, PFP303346, at p. 15-16
Evidence of Dr. Cutz, 18/12/2007, p. 44, line 14 to p. 45, line 18

PART 6 - DR. SMITH'S WORK AS A PATHOLOGIST

393. The results of the Chief Coroner's Review, as published by OCCO and reported widely in the media, depict Dr. Smith as an unqualified, error-prone pathologist who lacked the skills to perform autopsies competently and who rendered unreasonable opinions in Court.

394. The evidence at the Commission offers a more accurate and complete picture of Dr. Smith's quarter-century career, one that recognizes not only his frailties, but his qualifications, contributions and successes. More importantly, the evidence reveals the cultural factors which shaped Dr. Smith's development as a pediatric pathologist doing forensic work. Dr. Smith deserves a more just presentation of his life's work and at least some recognition that, for the most part, his work did not diverge from widespread practices in the 1980s and 1990s. Furthermore, Dr. Smith is entitled to the acknowledgement that the nineteen cases selected out of more than 1000 autopsies performed by him for OCCO represent a small minority of his overall work.

6.01 TRAINING AND ACCREDITATION

395. While Dr. Smith had no formal accreditation in forensic pathology and no formal forensic training, he was a fully qualified and accredited pediatric pathologist.

396. Dr. Smith completed a four-year residency in pathology and a fellowship in pediatric pathology before commencing his full-time practice as a pediatric pathologist at HSC, where he worked in the Department of Pathology for 24 years.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 8 – 11 and 22

397. In 1980, Dr. Smith successfully wrote both his Royal College of Physicians and Surgeons examination and his American Board of Medical Specialties examination in anatomic pathology. In

1999, Dr. Smith, Dr. Smith successfully wrote his American Board of Medical Specialties examination in pediatric pathology.

Reference: *Supra*, at pp. 11 - 12

398. Dr. Smith gave evidence that throughout his career he regularly attended pediatric pathology conferences, including the annual conference of the USA-Canadian Academy of Pathology and the Society of Pediatric Pathology. He also attended the pediatric sessions of meetings of the American Academy of Forensic Sciences' after 1991.

Reference: *Supra*, at pp. 12-13

399. Dr. Smith was also a Fellow of the Royal College of Physicians and the College of American Pathologists and a member of the US Canadian Association of Pathologists, the Society for Pediatric Pathology and the Canadian Medical Association.

Reference: Dr. Smith's Written Evidence, PFP303346, Appendix A, at p. 110

400. There has been no evidence at the Commission that Dr. Smith's basic knowledge and understanding of principles of pediatric anatomic pathology was anything but in accordance with expectations.

6.02 PROFESSIONAL CONTRIBUTION

401. Dr. Smith's Curriculum Vitae records his extensive participation in committees of provincial, local and hospital/university organizations and institutions, including the Canadian Association of Pathologists, the Royal College of Physicians and Surgeons of Canada, the Ministry of the Solicitor General, HSC and the University of Toronto.

Reference: *Supra*, at pp. 110-111

402. Moreover, Dr. Smith taught at the undergraduate and graduate level at the University of Toronto. For example, he was the Program Director for post-graduate training in pathology from 1985 to 1989, receiving the Department of Pathology's John B. Walter Prize in Teaching in 1989.

Reference: *Supra*, at pp. 136-137

403. In addition to his teaching, Dr. Smith published widely in refereed publications and was invited to present papers and lecture frequently in Ontario and elsewhere.

Reference: *Supra*, at pp. 111-137

404. In addition to these endeavours, it is clear that Dr. Smith took his responsibilities as Director of OPFPU seriously. Dr. Smith gave evidence that the most onerous aspect of his workload was the completion of medico-legal autopsies. Between 1991 and 2000, Dr. Smith typically performed between 60 and 90 medico-legal autopsies per year, which constituted between 43% to 71% of the medico-legal autopsies referred to OPFPU.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 17 and Appendix B, at p. 138

405. Dr. Smith's coroner's work constituted approximately 60% of his workload during the period 1991 to 2001.

Reference: *Supra*, at p. 18

406. Additionally, when requested by OCCO to assist on a particular case, he did so. Indeed, he was held out by OCCO to other pathologists as an individual available to consult on pediatric cases, and the record demonstrates that he did so in a number of cases (for instance, the Taylor case and the Baby F case).

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 36
Memo #631, PFP057584, at p. 354

407. When asked to make presentations on behalf of OCCO, Dr. Smith agree to do so. In fact, his curriculum vitae records 210 presentations to a variety of organizations regarding pediatric forensic issues.

> **Reference:** Dr. Smith's Written Evidence, PFP303346, at p. 36 and Appendix A, at pp. 130-136

408. Dr. Smith's dedication to the field of forensic pathology has also been unquestioned. Dr. Pollanen acknowledged that Dr. Smith was a committed practitioner. Dr. Young testified that Dr. Smith's commitment to matters of forensic importance was a rarity amongst pediatric pathologists and appreciated by OCCO.

> **Reference:** Evidence of Dr. Pollanen, 06/12/2007, p. 44, line 3 to 7
> Evidence of Dr. Young, 29/11/2007, p. 22, line 24 to p. 23, line 2

409. An example of his contribution, is his role as a member of the Pediatric Death Review Committee in contributing to the single most important progressive step in pediatric death investigations in two decades – that is, the publication of Memorandum #631. Dr. Pollanen described the protocol as follows:

> In April 1995, the "new protocol to be used in the investigation of the sudden and unexpected deaths of any child under 2 years of age" was implemented. This represented an important step in improving the quality of pediatric death investigations in Ontario and is still largely applicable today. Development of the protocol underscored the commitment to high-quality death investigations[.]

> **Reference:** Pollanen, "The Smith Review", PFP032588, at p. 7

6.03 ACCOLADES FROM COLLEAGUES

410. Not only was Dr. Smith's commitment to pediatric forensic pathology acknowledged, witnesses testified that he was approachable, responsive, respectful, collegial, cooperative, enthusiastic, decent and courteous. The evidence at the Commission has focused on many of Dr. Smith's frailties and there is no doubt that his more human qualities were on display during

times of extreme professional hardship. But there has also been significant positive evidence given by his former colleagues, which balances the negative attention he has received.

411. Dr. Smith's colleagues at HSC described Dr. Smith as follows:

(a) Dr. Taylor testified that Dr. Smith sought input from his colleagues within the spectrum of those practicing at HSC;

Reference: Evidence of Dr. Taylor, 18/12/2007, p. 107, lines 3 to 22

(b) Dr. Driver described Dr. Smith as easily available, willing to discuss matters with the SCAN team and very responsive to questions;

Reference: Evidence of Dr. Driver, 09/01/2008, p. 153, lines 4 to 11

(c) Dr. Huyer described Dr. Smith was very responsive, very nice, very respectful and genuinely interested in him as a person;

Reference: Evidence of Dr. Huyer, 09/01/2008, p. 153, line 20 to p. 156, line 5

(d) Dr. Thorner described Dr. Smith as very good to work with, collegial, friendly and cooperative.

Reference: Evidence of Dr. Thorner, 11/01/2008, p. 130, line 21 to p. 131, line 23

(e) Maxine Johnson described Dr. Smith as sociable, pleasant, a nice guy and someone with a "great personality"; and

Reference: Evidence of Maxine Johnson, 17/12/2007, p. 81 line 15 to p. 82 line 1

(f) Dr. Phillips described Dr. Smith as competent and his impression was that Dr. Smith was well liked by coroners, counsel and judges.

Reference: Interview Summary of Dr. Phillips, PFP303615, at pp. 10 and 11

412. Similarly, Dr. Smith's colleagues at OCCO described him as follows:

(a) Dr. Cairns testified that he was a good lecturer, dedicated to child death investigations and that he had nothing but the highest compliments to pay to him;

Reference: Evidence of Dr. Cairns, 26/11/2007, p. 30, lines 17 to 22

(b) Dr. Young testified that Dr. Smith accepted his advice arising from the Nicholas case without debate;

Reference: Evidence of Dr. Young, 30/11/2007, p. 144, line 21 to p. 145, line 16

(c) Dr. Chiasson described him as approachable, relaxed and someone who spent considerable time developing a rapport with residents and that while he was self confident, he was not arrogant. He went on to testify that Dr. Smith had a very positive reputation and that he was happy to engage in discussions.

Reference: Evidence of Dr. Chiasson, 07/12/2007, p. 12, lines 8 to 21 and p. 140, line 17 to p. 141, line 6; and p. 141, line 7 to p. 142, line 11

6.04 SURGICAL PATHOLOGY

413. While evidence was led suggesting Dr. Smith's surgical pathology was sub-standard, in fact, the evidence is that Dr. Smith was a competent surgical pathologist during his tenure at HSC. In any event, the quality of his surgical work is not relevant to the work of this Commission.

414. It is undisputed that the expectations of the pediatric pathologists practicing at HSC was very high and that many of the cases handled at HSC were amongst the more diagnostically challenging cases.

Reference: Evidence of Dr. Taylor, 19/12/2007, p. 8, lines 8 to 15

415. The few examples of concerns with Dr. Smith's surgical pathology were a minute subset of the vast number of surgical cases Dr. Smith was involved with during the course of his career.

Reference: Evidence of Dr. Thorner, 11/01/2008, p. 139, line 21 to p. 141, line 15

416. That Dr. Smith's skills as a surgical pathologist were not of serious concern is reflected by the fact that Dr. Thorner, who authored a memorandum outlining certain of those cases, had no recollection of the concerns until preparing for his testimony at the Commission.

Reference: Evidence of Dr. Thorner, 11/01/2008, p. 139, lines 15 to 18

417. Indeed, not a single colleague of Dr. Smith's gave any evidence that could lead to the conclusion that Dr. Smith was anything other than a competent surgical pathologist. To the contrary, as stated by Dr. Thorner, it is unlikely Dr. Smith could have passed his American Boards in pediatric pathology if he was anything but competent.

Reference: Evidence of Dr. Thorner, 11/01/2008, p. 162, lines 4 to 10
Evidence of Dr. Taylor, 19/12/2007, p. 10, lines 7 to 17
Interview Summary of Dr. Phillips, PFP303615, at p. 11

418. Further, in 2005, the Chief of Pathology at HSC, Dr. Taylor, arranged a review of Dr. Smith's surgical pathology work. He testified that the review was arranged not due to his concerns about Dr. Smith's competence. Instead, he simply felt it prudent to test his own opinion that Dr. Smith was competent.

Reference: Evidence of Dr. Taylor, 19/12/2007, p. 10, lines 7 to 17

419. Sixty cases were selected in which Dr. Smith rendered a diagnosis that would have impacted on patient management.

Reference: Letter from Dr. Taylor to Dr. Dimmick, PFP137904, at p. 1

420. The review was undertaken by Dr. James Dimmick, a pediatric pathologist and professor of pathology and laboratory medicine at the University of British Columbia.

Reference: Evidence of Dr. Taylor, 19/12/2007, p. 10, line 18 to p. 11, line 3

421. Dr. Dimmick undertook a blind study of the 60 surgical pathology cases, described by him as representing a "spectrum of challenging interpretations". In each case, he examined all the pathology slides without knowledge of the content of Dr. Smith's report and formed his own diagnostic opinion. Dr. Dimmick then reviewed Dr. Smith's pathology report and compared his diagnosis with Dr. Smith's reported diagnosis. On each case, Dr. Dimmick scored for agreement, minor disagreements with no or minimal patient consequence, or major discordance with serious implication for patient care.

Reference: Letter from Dr. Dimmick to Dr. Laxer, PFP137732, at p. 1
Evidence of Dr. Taylor, 19/12/2007, p. 15, line 20 to p. 16, line 15

422. Of the 60 surgical pathology cases, Dr. Dimmick concurred with Dr. Smith's diagnoses in 57 cases. In the remaining three, Dr. Dimmick disagreed in a minor way that had "no negative implications for patient care".

Reference: Letter from Dr. Dimmick to Dr. Laxer, PFP137732, at p. 1

423. Dr. Dimmick concluded as follows:

> In general I find Dr. Smith's reports to be appropriately informative, thorough and diagnostically accurate. Extrapolating from this review, the process of which I believe to be an appropriate assessment, I conclude that his performance is at a level expected for a pediatric pathologist in a sophisticated children's hospital dealing with complex diagnostics.

Reference: Letter from Dr. Dimmick to Dr. Laxer, PFP137906, at p. 1

6.05 NON-CRIMINALLY SUSPICIOUS CORONER'S WORK

424. Dr. Smith performed over a thousand autopsies for OCCO during his career. The overwhelming majority of those cases resulted in findings of natural disease, including SIDS and accidents, including fires.

Reference: Dr. Smith's Written Evidence, Appendix B, PFP303346, at p. 138

425. These statistics alone fly in the face of the suggestion that Dr. Smith was unduly suspicious and concluded every pediatric death was a homicide.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 50, line 22 to p. 51, line 10

426. Furthermore, it appears that Dr. Smith's breakdown of cases is statistically similar to other pathologists practicing in Ontario at the same time.

427. Dr. Carpenter performed most of the criminally suspicious pediatric autopsies from the Ottawa area during his career and has provided some information which permits an understanding of the breakdown of his cases. It appears that Dr. Carpenter concluded that at least 5% of the cases on which he performed the post mortem examination were homicidal in nature, a similar rate to Dr. Smith. Dr. Carpenter concluded approximately 20% of his cases were attributable to SIDS, a slightly higher rate than Dr. Smith. Dr. Carpenter concluded approximately 9% of his cases were accidents (a lower percentage than Dr. Smith). Dr. Carpenter concluded that only 4% of his cases were undetermined, almost half the rate of Dr. Smith.

Reference: Dr. Carpenter's CV, PFP301515, at p. 3

428. Additionally, all of Drs. Rao, Dexter, Shkrum and de Nanassy testified that of all Coroner's cases, approximately 10% are criminally suspicious and of those, approximately one half are determined to be homicides.

Reference: Evidence of Dr. de Nanassy, 20/12/2007, p. 81, lines 8 to 22
Evidence of Dr. Rao, 17/01/2008, p. 71, line 22 to p. 72, line 2
Evidence of Dr. Dexter, 17/01/2008, p. 79, line 6 to p. 80, line 7
Evidence of Dr. Shkrum, 17/01/2008, p. 70, lines 1 to 16
Annual Case Loads of Regional Forensic Units, PFP302981

429. Moreover, there has been no evidence at the Commission that any of Dr. Smith's work on non-criminally suspicious cases was problematic.

430. In 2001, OCCO commissioned a review of six of Dr. Smith's coroner's cases. The review was undertaken by Dr. Blair Carpenter, Chief of Pathology at the Children's Hospital of Eastern Ontario.

Reference: Letter from Dr. Chiasson to Dr. Carpenter, PFP056712, at p. 1
Evidence of Dr. Cairns, 27/11/2007, p. 65, line 18 to p. 67, line 12

431. Dr. Carpenter evaluated each case from a perspective of gross descriptions, gross photographs, microscopic descriptions, use of ancillary tests, summary of diagnoses, comments and causes of death.

Reference: Letter from Dr. Carpenter to Dr. Chiasson, PFP115206, at p. 1

432. Dr. Carpenter concluded as follows:

> In all cases, the quality of the gross description, gross photographs, gross sampling for miscroscopy and microscopical descriptions were of the highest quality, above average for what is expected from the average pathology service, highly accurate and without obvious omissions. The selection of ancillary tests such as bacteriology/virology sampling, x-rays and toxicology were always ordered when required. The summary of the diagnoses were usually clear, precise and in accordance with the gross and microscopical findings without significant diagnostic mistake. The causes of death were short and to the point. I personally agreed with all the diagnoses and causes of death. The addition of notanda in some of the cases was useful in fully understanding the underlying pathology processes.

Reference: *Ibid*

433. Dr. Carpenter confirmed in his evidence that, in his opinion, Dr. Smith's work in the cases he reviewed was "excellent" and that he continues to hold that opinion today.

Reference: Evidence of Dr. Carpenter, 20/12/2007, p. 248, line 11 to p. 253, line 10

434. Dr. Chiasson described the Carpenter Review as a "commendation" of Dr. Smith's work in those cases.

Reference: Evidence of Dr. Chiasson, 11/12/2007, p. 65, line 13 to p. 67, line 2

435. Indeed, Dr. Chiasson testified that at no time did OCCO have any reason to believe that Dr. Smith's work in the non-criminally suspicious cases was a problem and that based on the Carpenter

Review, he had no concerns at all about Dr. Smith's competence to perform non-criminally suspicious work.

Reference: Evidence of Dr. Chiasson, 10/12/2007, p. 138, line 17 to p. 139, line 1

436. It is important to point out that the vast majority of Dr. Smith's work was on non-criminally suspicious cases in which his pediatric expertise would be well suited and the lack of forensic training would be less relevant. That this work was apparently well done suggests that the vast majority of Dr. Smith's work for the coroner was of high quality. This work should not be overshadowed by a small percentage of criminally suspicious cases for which he lacked specific training, expertise and support.

6.06 CHIEF CORONER'S REVIEW

437. In June, 2005, Dr. McLellan, the then Chief Coroner for Ontario directed that a formal review be undertaken of the pathology materials of all of the homicide or criminally suspicious autopsies since 1991 where Dr. Smith conducted the autopsy, or where he provided an opinion. The mandate of the review was to determine "whether the conclusions reached by Dr. Smith can be supported by the information and materials available, including the tissues and slides…".

Reference: Press Release, PFP140159, at p. 2

438. In November 2005, Dr. McLellan announced the proposed methodology of the review.

Reference: Backgrounder, PFP033969

439. On April 19, 2007, Dr. McLellan announced the results of the review. In all but one of the 45 cases (44/45 or 98%), the reviewers agreed that Dr. Smith had conducted the important examinations that were indicated. The one case in which a concern was raised about the testing of a specimen was the Jenna case, which as is set out in detail below, is an error that is not entirely

attributable to Dr. Smith. Moreover, the omission of testing had no known implication for the progress of the investigation or its ultimate outcome.

Reference: Backgrounder, PFP058378, at p. 3
See Section 8.05(2)

440. Moreover, in 36/45 cases (80%), the reviewers agreed with the significant facts that appeared in either a written report or that was presented in expert testimony in Court.

Reference: Backgrounder, PFP058378, at p. 3

441. This reflects the evidence of Dr. Perrin and Dr. Huyer, both of whom testified that Dr. Smith was a skilled prosector.

Reference: Evidence of Dr. Perrin, 17/12/2007, p. 180, lines 6 to 20
Evidence of Dr. Huyer, 09/01/2008, p. 161, line 8 to p. 162, line 20

442. Finally, Dr. McLellan advised that in 25/45 (55%) of the cases reviewed, there was agreement with the interpretation of the examinations conducted with regard to the cause and, where provided, the mechanism of death.

Reference: Backgrounder, PFP058378, at p. 4

443. For the sake of argument, if one assumes these results are correct and if one does not dispute the reviewers' findings (which Dr. Smith does in respect of some conclusions, as detailed below), when taken together, these results demonstrate that in respect of Dr. Smith's basic pathology, there was little concern. As the evidence revealed in respect of the individual cases, for the most part, there was concurrence with Dr. Smith's autopsy methodology and his abnormal findings.

444. The primary issue raised by the reviewers was Dr. Smith's interpretation of some pathology findings to arrive at an opinion as to the cause of death or in respect of other forensically relevant issues. It is not surprising that the reviewers' primary concern was in respect of Dr. Smith's

interpretations. The cause of death in criminally suspicious cases and other interpretive issues in forensic pathology are areas for which Dr. Smith had no training. They are also issues of interpretation which, as noted above, in the absence of established diagnostic criteria, can be extremely challenging for any pathologist, but particularly an untrained one. Finally, many of the cases in which the reviewers raised concerns about Dr. Smith's interpretive conclusions were acknowledged to be amongst the most challenging cases in forensic pathology and would predictably produce differing opinions even amongst well-trained, experienced forensic pathologists.

Reference: Pollanen, "Systemic Issues", PFP301189, at p. 3
Cordner, "Pediatric Forensic Pathology", PFP301639, at pp. 122-30

445. Moreover, Dr. Pollanen acknowledged that there was no control group done on this audit of Dr. Smith's work. Indeed, he admitted that it is not known how another pathologist, with similar training, practicing in Ontario in the 1980s and 1990s would have fared under the same scrutiny.

Reference: Evidence of Dr. Pollanen, 15/11/2007, p. 22, line 11 to p. 23, line 6 and
06/12/2007, p. 48, line 18 to p. 51, line 8
Pollanen, "The Smith Review", PFP032588, at p. 6

6.06(1) Scope of Review

446. The Chief Coroner's Review was developed as a "quality audit on the selected cases of an individual pathologist". Dr. Pollanen acknowledged that in this respect, the review was narrowly construed:

> The review did not audit or make an assessment of the efficacy of the oversight of Dr. Smith's work, or assess how the death investigation system or criminal justice system interfaced with Dr. Smith. The Smith review was limited to the 'micro-level', rather than the `macro-level'. Thus, the results of the Smith review are skewed toward results about individual autopsies performed by a single pathologist. The Smith review was not designed as a holistic assessment of the quality of processes in the Ontario Coroner's system at the time that the autopsies were performed…An autopsy is one component of the death investigation. In the Coroner's system, the pathologist performs the autopsy, but the Coroner is responsible for the entire death investigation and its conclusions (cause and manner of death). The Smith review did not contemplate these issues. In fact, the Smith review was not designed to examine the comprehensive death investigation of any of the cases, just the pathologist's part of the death investigation. A balanced view of Dr. Smith's deficiencies should include the context of the entire death investigation.

Reference: Pollanen, "The Smith Review", PFP032588, at p. 6

447. The review, constructed as it was, resulted in Dr. Smith being unfairly cast as the sole cause of various problems identified in certain pediatric death investigations. And yet, the record demonstrates countless other issues that contributed to challenges in these cases including but not limited to:

(a) inadequate death scene investigations;

(b) insufficient information being given to Dr. Smith prior to the autopsy;

(c) a tradition of oral communications between police and pathologist resulting in misunderstandings, misinterpretations and misuse of pathology evidence;

(d) an unwillingness or lack of appreciation of the importance of obtaining experts in the right discipline to render opinions on forensically relevant issues;

(e) inadequate role of the Crown in making decisions about charges;

(f) lack of knowledge and understanding on the part of the Crown regarding forensic evidence;

(g) insufficient communication between the Crown and the pathologist;

(h) an experience-based approach to the rendering of opinions on cause of death;

(i) an accepted use of circumstantial evidence; and

(j) no standards with respect to the language used to express opinions in writing or in Court testimony.

Reference: See Part 4

448. This Commission, which was also narrowly construed to look only at pediatric forensic pathology (and collected no evidence about any pediatric forensic pathology cases other than Dr.

Smith's) and its inter-relationship with the criminal justice system, must be cautious not to fall prey to the same trap – that is, making determinations as to the impact of the pathology work, namely Dr. Smith's work, on any particular pediatric death investigation in the absence of a evidence about the wider death investigations, including evidence from police officers, Crowns and defence counsel as to how the investigation and prosecutions evolved and why particular decisions were taken. Simply put, the record is incomplete.

Reference: See Section 2.03

449. Moreover, it is not the mandate of the Commission to draw conclusions as to the impact of the pathology on the pediatric death investigations. Rather, the mandate of the Commission is to identify systemic failings that may have occurred in connection with the oversight of pediatric forensic pathology in Ontario and make recommendations in respect thereof.

Reference: See Part 2

6.06(2) Choice of Reviewers

450. As acknowledged by Dr. Smith in his testimony, the external reviewers chosen by the Office of the Coroner to review Dr. Smith's cases are undoubtedly qualified and respected forensic pathologists. Moreover, they appear to have approached their tasks sincerely and diligently.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 104
Evidence of Dr. Smith, 28/01/2008, p. 147, lines 17 to 21

451. However, the external reviewers undoubtedly approached their review of the cases from a fundamentally different perspective.

452. First, all of the external reviewers have vastly more training in forensic pathology than Dr. Smith ever had.

Reference: Dr. Milroy's CV, PFP058454
Dr. Crane's CV, PFP033869
Dr. Whitwell's CV, PFP033931
Dr. Saukko's CV, PFP0302335
Dr. Butt's CV, PFP033949

453. Second, none of the external reviewers practice, or have ever practiced, exclusively in pediatric pathology, as Dr. Smith did.

Reference: *Ibid*

454. Third, none of the reviewers ever practiced in Ontario and would have little appreciation of the legal, cultural or political framework within which Dr. Smith worked in the 1980s and 1990s.

Reference: *Ibid*

455. Finally, all of the reviewers have the benefit of ten to fifteen years of growth in knowledge in the discipline of pathology generally and forensic pathology specifically, including pediatric forensic pathology. This growth in knowledge informed their opinions.

456. One cannot underestimate the impact of perspective when approaching a review of the work of another medical expert, particularly when the reviewer is not similarly situated to the person being reviewed. It would be folly for this Commission not to contextualize the reviewers' comments and criticisms in this regard:

> [The expert's] perspective is that of a specialist in neurology and that any standard of care which he offered or any criticism which he offered of the performance of the defendant doctors would inevitably be coloured and determined by his specialty.

Reference: *Wilkinson Estate* v. *Shannon* (1986), 37 C.C.L.T. 181 at 190-91

6.06(3) Choice of Cases

457. It is also important to consider the review population of the 45 cases reviewed.

458. First, the cases chosen represent only a very small subset of Dr. Smith's work done under warrant for OCCO. Indeed, the evidence is that between 1989-2004, Dr. Smith performed at least

828 Coroner's autopsies. The vast majority of these cases were, as stated above, natural and/or accidental deaths.

Reference: Memorandum of Dr. Pollanen to Dr. McLellan, PFP032588, at p. 5
Dr. Smith's Written Evidence, PFP303346, at pp. 104 and 138

459. As stated by Dr. Pollanen, it is simply a false depiction of the review results to calculate an "error rate" using 45 cases as the denominator:

> This would be misleading since the denominator does not represent the total numbers of cases autopsied by Dr. Smith in the relevant time. Over the time period of the review, Dr. Smith performed hundreds of autopsies; thus, it might be more valid to express the findings of the Smith review using a larger denominator. The implications are obvious: the numbers of errors identified in the Smith review could lead to a perception of a `large error rate', but this is probably misleading.

Reference: Memorandum of Dr. Pollanen to Dr. McLellan, PFP032588, at pp. 5-6
Evidence of Dr. Pollanen, 14/11/2007, p. 89, line 19 to p. 90, line 20

460. Second, the cases chosen to be considered as part of the Chief Coroner's Review were undeniably pre-selected for controversy. Indeed, they have been characterized by witnesses as being amongst the most difficult kinds of cases in forensic medicine.

Reference: Evidence of Dr. Pollanen, 15/11/2007, p. 19, line 9 to p. 21, line 19
Evidence of Dr. McLellan, 14/11/2007, p. 127, lines 7-8
Evidence of Dr. Chiasson, 10/12/2007, p. 179, line 1 to p. 180, line 11
Dr. Michael Pollanen, Policy Roundtable, 11/02/2008, p. 175, line 20 to p. 176, line 14

461. In fact, Dr. Pollanen admitted that the nineteen cases encompassed almost all of the "controversies, challenges or enigmas" in pediatric pathology that he identified in his Review of Systemic Issues.

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 48, line 18 to p. 51, line 8
Pollanen, "Systemic Issues", PFP301189, at p. 3

462. As such, it is not surprising that Dr. McLellan went so far as to admit that the outcome of the review of these cases was "predictable" and the result of a sort of "confirmation bias" – in other

words, confirming that these cases were controversial, challenging and likely subject to differences of opinion.

Reference: Evidence of Dr. McLellan, 14/11/2007, p. 127, lines 10-14

463. Third, all of the cases were pre-examined by Dr. Pollanen and the reviewers were given a "synopsis of each case indicating relevant medico-legal issues for review". Indeed, Dr. Pollanen admitted that what he did was actually identify for the reviewers potential problems that might be found in the cases.

Reference: Evidence of Dr. Pollanen, 15/11/2007, p. 21, line 25 to p. 22, line 14
Pollanen, "The Smith Review", PFP032588, at p. 3
Preliminary Observations on Smith Review Cases, PFP032579

464. Thus, the reviewers were not only handed a set of cases that were pre-selected for controversy, but all of the controversial issues were specifically identified for them in advance, making it virtually impossible for them to consider the cases impartially.

6.06(4) Methodology of Review

465. The Chief Coroner's Review was admittedly not a randomized, blind audit of Dr. Smith's work. One of the main defects of the review was that reviewers were not asked to review the cases independently, without knowledge of either Dr. Smith's findings, opinions and conclusions, or the findings, opinions and conclusions of other pathologists involved in the case either at the time, or subsequently.

Reference: Pollanen, "The Smith Review", PFP032588, at p. 2

466. The reviewers could have reviewed, at first instance, only the coroners' warrants, hospital records, primary source materials (photographs, tissue slides etc.) and any other material that was available to Dr. Smith at the time he conducted the post mortem examination. Then after reviewing

those materials and reaching their own conclusions as to the forensically significant findings, they could have reviewed Dr. Smith's post mortem examination report and his testimony.

467. This was the approach taken by Dr. Dimmick in his audit of Dr. Smith's surgical pathology files.

Reference: See Section 6.04

468. By contrast, the reviewers were given voluminous materials that were never seen by or even available to Dr. Smith. For example, in the Valin case, the reviewers were given the following materials for consideration, none of which were available for Dr. Smith's consideration at the time he was consulted in this case:

(a) Eleven consultation reports, eight of which post-dated the completion of the case by ten years:

(i) Report of Dr. Ferris, June 1994;

(ii) Report of Dr. Jaffe, September 1993;

(iii) Report of Dr. Zehr, June 1993

(iv) Dr. Pollanen's consultation report, January 19, 2005;

(v) Dr. Pollanen's supplementary report, June 29, 2005;

(vi) Dr. Knight's consultation report, dated August 11, 2005;

(vii) Report of Dr. Ferris, January 12, 2006;

(viii) Report of Dr. Rasaiah, September 19, 2005;

(ix) Report of Dr. Rasaiah, September 21, 2005

(x) Report of Dr. Rasaiah, September 26, 2005;

(xi) Report of Dr. Rasaiah, December 12, 2005

(b) Transcripts of evidence from the trial of all the medical experts, including Dr. Crookston, Dr. Zehr, Dr. Rasaiah, Dr. Smith, Dr. Jaffe and Dr. Ferris;

(c) Decision of the Court of Appeal, December 1996

Reference: Medico-Legal Report of Dr. Butt, PFP004065, at p. 2

469. Likewise, in the Jenna case, the reviewers were given the following materials, also not available to Dr. Smith at the time he proffered his opinion on the case:

(a) Report of Dr. Fitzgerald, June 1999;

(b) Report of Dr. Finkel, June 1999;

(c) Report of Dr. Pollanen, June 2004;

(d) Report of Dr. Porter, May 1999;

(e) Report of Dr. Wood, October 2004;

(f) Report of Dr. Ein, October 2001;

(g) Report of Dr. Feldman, April 2002; and

(h) Peterborough Police Homicide Review Report

Reference: Medico-Legal Report of Dr. Milroy, PFP135465, at pp. 3-4

470. These examples demonstrate that the reviewers had materials available to them that identified issues, cited research articles, synthesized evidence and relied on additional facts and information.

None of this was available to Dr. Smith, or to anyone, at the time the cases were initially investigated.

471. While it was appropriate for these reviewers to render opinions that were accurate for use in the criminal justice system today, there is little doubt that they were given an artificially elevated position from which to assess Dr. Smith's work in those cases. It is virtually impossible, even with the best of intentions, not to fall prey to hindsight bias in these circumstances. There is no doubt that the reviewers would have been informed by these additional materials and reports. Query, if the reviewers had not been instructed in advance that a case was problematic or controversial and had not had the benefit of other experts' findings and conclusions, whether they might have arrived at different conclusions. This is not to suggest that they would necessarily have agreed with Dr. Smith more than they did in the various cases, but rather, it is less likely that they would have reached any consensus as to the appropriate cause of death and other forensically relevant issues.

6.06(5) Dr. Smith Given No Prior Opportunity to Reconsider

472. From the outset, Dr. Smith recognized that it was important that the Chief Coroner's Review be an independent and objective review of the pathology in the selected cases. Indeed, he communicated his appreciation of this fact shortly after the review was announced.

Reference: Letter of Ms Langford to Mr. O'Marra, PFP139919, at p. 1

473. There is no evidence that Dr. Smith ever sought to interfere with, obstruct or derail the review of his work. Indeed, the evidence is to the contrary. In 2001, when issues were raised about his work in the Tyrell and Sharon cases, Dr. Smith requested an independent review of his work. Later that year, he welcomed the Carpenter review of his non-criminally suspicious cases. In 2005, he cooperated with the Dimmick review of his surgical pathology at HSC. This demonstrates his

genuine interest in ensuring accurate results for the families and patients who could be affected by his work and his willingness to withstand scrutiny from his peers. Contrary to some suggestions, there is no reliable evidence that Dr. Smith considered himself beyond reproach.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 37
Letter from Dr. Smith to Dr. Young, PFP056696
Evidence of Dr. Cairns, 27/11/2007, p. 36, lines 11 to 21
Evidence of Dr. Taylor, 19/12/2007, p. 11, lines 8 to 24
Evidence of Dr. McLellan, 13/11/2007, p. 25, lines 17 to 18

474. However, principles of fairness made it incumbent on OCCO to give Dr. Smith the opportunity to review his findings, opinions and conclusions in the disputed cases, to answer any inquiries the reviewers might have had that could have at least clarified his thinking and to re-consider his opinions with the benefit of today's knowledge and insight.

475. Instead, the only involvement Dr. Smith had in the review was his voluntary identification of materials that might assist the reviewers in their work and the provision of his own pathology files in respect of the 45 cases, again, at his own initiative.

Reference: Letter from Ms Langford to Mr. O'Marra, PFP139919, at p. 1
Evidence of Drs. McLellan and Pollanen, 14/11/2007, p. 46, lines 15 to 20

476. Neither Dr. McLellan, nor Dr. Pollanen had a particularly cogent explanation for denying Dr. Smith the opportunity to provide some insight or comment on his work for the benefit of the independent reviewers:

> MS. LINDA ROTHSTEIN: . . . [C]an you assist us as to what thought had been given about the extent to which Dr. Smith should be consulted or involved in the review process?
>
> DR. BARRY MCLELLAN: …It was felt that it would not be appropriate for Dr. Smith to participate, directly, in the review process, and there was a consensus at the level of the full committee on that point.
>
> **Reference:** Evidence of Dr. McLellan, 14/11/20007, p. 37, lines 6 to 16
>
> MS. LINDA ROTHSTEIN. Why was it felt appropriate?

> DR. MICHAEL POLLANEN. …it was felt appropriate because we believe that the design dealt with the methodological issues that were relevant and that the appearance of the process being independent was best served by not having Dr. Smith intimately involved with the review.
>
> **Reference:** Evidence of Dr. Pollanen, 14/11/2007, p. 38, lines 4 to 16

477. The decision to deprive Dr. Smith even the basic right to provide some insight into his analysis of the case seems particularly odd in light of the fact that the sub-committee felt it was important to provide context to the external reviewers and the decision to have Dr. Pollanen review all the cases and provide his comments. Dr. Pollanen maintains that the synopsis was not intended to influence the reviewers. Similarly, surely the reviewers would not have been influenced by Dr. Smith providing some comments and insight and framing the issues from the perspective of the pathologist who actually did the work under review.

> **Reference:** Evidence of Dr. Pollanen, 14/11/2007, p. 78, lines 1 to 18
> Evidence of Drs. McLellan and Pollanen, 14/11/2007, p. 46, lines 15 to 20
> Letter from Ms Langford to Mr. O'Marra, PFP139909
> Preliminary Observations on Smith Cases for External Review, PFP032579

478. Regardless of the motivation behind the decision to exclude Dr. Smith entirely from the review, it is clear from their reports that the reviewers were forced to make assumptions about his thought process and other contextual factors relevant to his work which resulted in the reviewers' many errors as outlined below. There is little doubt that their conclusions as to the extent of Dr. Smith's errors may have been different if they had had a chance to appreciate why he arrived at the conclusions he did.

6.06(6) General Problems

479. There is also little doubt that the reviewers were ill-informed about the practice and culture of pediatric forensic pathology in Ontario in the 1980s and 1990s. In fact, there is no evidence that the

sub-committee took any steps to educate the reviewers about temporal, cultural and jurisdictional differences.

480. In fairness to OCCO, no doubt its primary concern was the accuracy of the forensic pathology, viewed with the expertise of forensic pathology today. Unfortunately, the reviewers also used that perspective to criticize Dr. Smith for work done in the past. Having done so, it becomes necessary to point out the numerous errors in the review. Although specific errors in individual cases are addressed within Parts 7 to 9, below, in general the reviewers' errors include:

(a) a failure to acknowledge controversy and uncertainty in the science of pathology;

(b) a failure to acknowledge the evolution of knowledge in pathology over the past ten to fifteen years;

(c) a failure to acknowledge the significance of divergence of opinions;

(d) a failure to acknowledge systemic differences between jurisdictions;

(e) a failure to acknowledge practices that may be inadequate but widespread; and

(f) a failure to acknowledge the importance of clinical findings.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 104 to 107

6.06(7) Evidence re: Specific Cases under Review

481. The statistic 20/45 has been widely touted in the media to describe the rate of Dr. Smith's errors in respect of the cause of death in the cases considered in the Chief Coroner's Review. With respect, this number is inaccurate in light of the evidence at this Commission.

482. Below the main issues raised by the reviewers in respect of the individual cases are addressed in Parts 7 to 9 in the context of the evidence heard by the Commission. Upon review of that evidence, it is clear that:

(a) Dr. Smith made fewer "mistakes" than originally reported;

(b) His mistakes were of varying degrees of significance vis-à-vis the criminal investigation and prosecution in respect of specific deaths; and

(c) His work was frequently endorsed by other pathologists and clinicians at the time, suggesting that cultural factors and the state of knowledge may have played a key role in the disputed findings.

483. Moreover, not every mistake made by Dr. Smith is necessarily "unreasonable". An error of judgment is distinguishable from an act of unskillfulness, carelessness or a lack of judgment. A physician is not liable for an error in judgment if his judgment was exercised honestly and intelligently in contemplation of the pertinent facts known at the time the decision was made. An honest and intelligent exercise of judgment, which is in conformity with the reasonable standard of his peers, has long been recognized as satisfying a physician's professional duty:

> [C]ourts should be careful not to rely upon the perfect vision afforded by hindsight. In order to evaluate a particular exercise of judgement fairly, the doctor's limited ability to foresee events when determining a course of conduct must be borne in mind. Otherwise, the doctor will not be assessed according to the norms of the average doctor of reasonable ability in the same circumstances, but rather will be held accountable for mistakes that are only apparent after the fact. Both doctrine and caselaw emphasise that medical professionals should not be liable for mere errors of judgment which are distinguishable from professional fault"
>
> . . .
>
> Given the number of available methods of treatment from which medical professionals must at times choose, and the distinction between error and fault, a doctor would not be found liable if the diagnosis and treatment given to a patient correspond to those recognized by medical science at the time, even in the face of competing theories. As expressed more eloquently by André Nadeau in "La Responsibilité Médicale" (1946)…

> The courts do not have jurisdiction to settle scientific disputes or to choose among divergent opinions of physicians on certain subjects. They may only make a finding of fault where a violation of universally accepted rules of medicine has occurred. The courts should not involve themselves in controversial questions of assessment having to do with diagnosis or the treatment of preference.

Reference: *Lapointe v. Chevrette*, [1992] 1 S.C.R. 351 at pp. 362 - 364

PART 7 - ASPHYXIA CASES

7.01 INTRODUCTION

484. Dr. Smith's diagnosis of asphyxia as a cause of death was challenged in nine of the nineteen cases considered by the external reviewers. In each case, the reviewers' criticism were twofold. First, the reviewers stated that "asphyxia" is a mode, not a cause of death and should never be used to explain death because of its ambiguous meaning. Second, they allege that Dr. Smith reached this diagnosis in the absence of any pathology findings on post mortem examination; that is, that he relied upon obsolete, non-specific signs of asphyxia.

Reference: Medico-Legal Report re Baby M, PFP135499
Medico-Legal Report re Baby F, PFP135489
Medico-Legal Report re Katharina, PFP135508
Medico-Legal Report re Valin, PFP004065
Medico-Legal Report re Joshua, PFP135527
Medico-Legal Report re Kenneth, PFP135439
Medico-Legal Report re Delaney, PFP135429
Medico-Legal Report re Tamara, PFP135457
Medico-Legal Report re Tiffani, PFP152220

485. The evidence at the Commission, including evidence from the reviewers themselves, demonstrates that the reviewers were unduly harsh in their criticism and that the diagnosis of asphyxia was reasonable based on the pathology, the circumstantial or situational information available to Dr. Smith and the culture of pediatric forensic pathology in Ontario at the time.

486. Several general comments can be made that are applicable in each case. First, while it may not be frequently used in forensic pathology, according to Dr. Chiasson, the diagnosis of asphyxia is more commonly used in pediatric pathology. In his role as CFPU and later Director of OPFPU, he saw asphyxia given as a cause of death..

Reference: Evidence of Dr. Chiasson, 10/12/2007, p. 88, line 6 to p. 89, line 24

487. Dr. Chiasson also testified that while forensic pathologists might consider asphyxia as implying a non-natural, non-accidental death, pediatric pathologists are more inclined to use the term to reflect its actual meaning – that is, impaired supply to and/or utilization of oxygen by the tissues and/or organs in the body.

Reference: Evidence of Dr. Chiasson, 10/12/2007, p. 88, line 6 to p. 89, line 24

488. A review of Dr. Smith's evidence in the asphyxia cases demonstrates that this was how he used the term:

> I'll give you a definition. Asphyxia refers to a condition affecting the organs of the body or the body wherein there is impaired delivery or utilization of oxygen. An injury occurs because either there is inadequate supply of oxygen or the oxygen which is present cannot be properly used.

Reference: Dr. Smith's Trial Evidence in Kenneth, PFP063601, at p. 49

See also: Dr. Smith's Preliminary Hearing Evidence re: Tamara, PFP071289, at pp. 25 to 27
Dr. Smith's Preliminary Hearing Evidence re: Tiffani, PFP005543, at pp. 12 to 13
Dr. Smith's Preliminary Hearing Evidence re: Joshua, PFP062608, at p. 6, lines 10 to 13
Dr. Smith's Trial Evidence re: Paolo, PFP017346, at p. 160, lines 10 to 13

489. In fact, a review of the reported case law reveals numerous cases in which pathologists (not just pediatric pathologists) other than Dr. Smith, including Dr. Shkrum, Dr. Chiasson, Dr. Jaffe, Dr. Dexter and Dr. Noel MacAuliffe, a staff pathologist at OCCO, diagnosed asphyxia as the cause of death based on remarkably similar findings and circumstances to those found in many of the cases considered by the Commission. For example, in *Gentles v. Ontario (Attorney General)*, a mother tried to commence criminal proceedings arising from the death of her adult son in custody in 1993. The following excerpt from the judgment demonstrates that the diagnosis of "asphyxia" as a cause of death was not unique to Dr. Smith:

> At the time the Crown withdrew the charges it had in hand the opinions of three pathologists, Dr. D.F. Dexter, who performed the post mortem examination, Dr. F.A. Jaffe, who subsequently examined the body at the instance of the applicant, and Dr. D.A. Chiasson, who reviewed the evidence and the

> reports of the other pathologists. *It is common ground among them: That Mr. Gentles died of asphyxia, i.e. interference with respiration; that examination of the body alone did not furnish the cause of asphyxia; that it could have been caused by smothering or by positional asphyxia*, that is, interference with breathing as a result of the victim being prone, agitated and struggling, while his hands were secured behind him; and that all of the other evidence, including that of those present at the time, would have to be assessed to determine that cause of death. Dr. Dexter did not say which of those possibilities was the cause of death. Dr. Jaffe's opinion was that Mr. Gentle's death was due to smothering, and that the distinction between smothering and positional asphyxia was academic and meaningless because both elements were involved in Mr. Gentle's death: he agreed that the evidence on that issue was meagre. Dr. Chiasson tended towards positional asphyxia but did not exclude the possibility of smothering. [emphasis added]

Reference: *Gentles v. Ontario (A.G.)*, 1996 CarswellOnt 4247 (OGD), at para. 15

See also: *R. v. Bennett*, 2003 CarswellOnt 3716 (C.A.), at paras. 16-17
R. v. Terceira 1998 CarswellOnt 390 (C.A.), at paras. 4, 83-85, 90-91
R. v. Murie, 2000 CarswellOnt 4990 (SCJ), at paras. 1, 13
R v. Malboeuf, 1992 CarswellOnt 2200 (OGD), at paras. 10-17

490. If the reviewers assumed that the use of asphyxia, in and of itself, meant that Dr. Smith had concluded the manner of death was homicidal based on the pathology alone, they did so incorrectly. He frequently testified to the effect that he did "not know how the asphyxia occurred".

Reference: Dr. Smith's Preliminary Hearing Evidence re: Joshua, PFP062608, at p. 7, lines 8 to 9
Dr. Smith's Trial Evidence re: Paolo, PFP017346, at p. 162, line 23 to p. 163, line 23
Dr. Smith's Preliminary Hearing Evidence re: Kenneth, PFP093531, at p. 32, lines 1 to 13
Dr. Smith's Preliminary Hearing Evidence re: Tamara, PFP071289, at p. 41, lines 11 to 13

491. Similarly, if the reviewers assumed the Coroner, police and Crown understood asphyxia to mean homicide, that belief is belied by the information provided by Dr. Smith to the police and the Crown wherein he frequently explained the meaning of the term.

Reference: See Section 7.07(6) re: Joshua
See Section 7.09(2) re: Kenneth
See Section 7.08(2) re: Tiffani

492. Second, both Dr. Crane and Dr. Butt acknowledged that the diagnosis of asphyxia is appropriate if the particular cause of the asphyxia is also stated in the post mortem report:

> MS JANE LANGFORD: …Am I right, then, to say … that you believe that a pathologist can diagnose asphyxia as a mode of death, if the particular cause of asphyxia is expressly stated?

DR. JACK CRANE: Yes, and - - and the cause is apparent, of course

Reference: Evidence of Dr. Crane, 21/11/2007, p. 213, lines 4 to 10

MS JANE LANGFORD: So I take that comment, Dr. Butt, together with your evidence this morning on this case, to really be in agreement with Dr. Crane, and that is that it is acceptable for a pathologist to diagnose asphyxia when, first of all, they state the cause of that asphyxia and clearly provide the basis upon which they are making that diagnosis?

DR. JOHN BUTT: Yes

Reference: Evidence of Dr. Butt, 21/11/2007, p. 217, line 25 to p. 218, line 8

493. As such, according to Drs. Butt and Crane, while it is not adequate to diagnosis "asphyxia" alone, it would be reasonable for a pathologist to diagnose "plastic bag asphyxia" or "asphyxia by strangulation" as a cause of death.

494. While the mechanism of the asphyxia can sometimes be obtained from the pathology itself, such as in cases of manual strangulation, it can also be found in the circumstantial or historical information provided to the pathologist. Specifically, both Drs. Crane and Butt admitted on cross examination that it is perfectly appropriate for a pathologist to rely on circumstantial evidence as the explanation for the asphyxia:

MS JANE LANGFORD: And that apparent cause, if you will, could come from the pathology findings itself?

DR. JACK CRANE: Yes, that's correct.

MS JANE LANGFORD: Is it also true then, sir, that you could also know the cause of asphyxia from the historical circumstances presented to you?

DR. JACK CRANE: Yes, it is - - it is possible.

MS JANE LANGFORD: And so, if I can give you an example of that. If the police were to advise you that they received a caution - - a cautioned statement from an individual who stated that they had placed their infant in a bag - - a plastic bag, for example, you would feel comfortable diagnosing … "plastic bag suffocation? But you would feel comfortable with a diagnosis of asphyxia due to plastic bag suffocation?

DR. JACK CRANE: Yes. If I could just expand on that…what I would do is I would be comfortable to put that in my cause of death. But in my commentary, I would explain how I came to that conclusion…In other words, on the basis of the information that was provided to me. And I would also have to make the point that the autopsy didn't reveal anything…"

MS JANE LANGFORD: And so, am I taking it from that, that as long as you expressly state the source of the information upon which you are relying, whether it be the pathological findings, or, in

> the second example, the information provided to you by the police, you are comfortable with the pathologist relying on either and diagnosing asphyxia due to one of those causes?
>
> DR. JACK CRANE: Yes…we're just a little bit more, perhaps, careful in our approach to diagnosing something on the basis simply of information provided to us.
>
> MS JANE LANGFORD: And that's where you're all the more careful in your commentary or your explanation…
>
> DR. JACK CRANE: That would be right.
>
> **Reference:** Evidence of Dr. Crane, 21/11/2007, p. 213, line 4 to p. 215, line 19
>
> MS JANE LANGFORD: And you would also state that it is perfectly appropriate in those circumstances, for a pathologist to rely upon, as you've called it, historical information provided to … to him.
>
> DR. JOHN BUTT: I would agree with that.
>
> MS JANE LANGFORD: But even in the absence of any specific findings on autopsy, it is appropriate to state a diagnosis of asphyxia when you have historical information that you state you are relying upon.
>
> DR. JOHN BUTT: Yes. And if I may add to that, it may - – such information may be entirely situational. For example, this is a common dilemma in persons found in the water at which there may be no historical information whatsoever; there's just a situation which is hostile.
>
> MS JANE LANGFORD: And this harkens back to our - - the start of our cross examination when we talked about the importance of having a format of an autopsy report that allows a pathologist to provide that kind of explanation, including the circumstances where, in your example, the child was found, and that would be somewhere in the water; or, alternatively, information provided to the pathologist from the police?
>
> DR. JOHN BUTT: Yes
>
> MS JANE LANGFORD: But there would be nothing inappropriate of an explanation of that sort, being asphyxia, based on historical information?
>
> DR. JOHN BUTT: As long as the factors that – I have - - are here, that you read out, are explained, then I have no problem with it.
>
> **Reference:** Evidence of Dr. Butt, 21/11/2007, p. 218, line 9 to p. 220, line 4

495. Third, it appears that the reviewers were so focused on Dr. Smith's apparent reliance on the "obsolete quintet" that they failed to acknowledge that there are general, non-specific findings widely accepted to be consistent with an asphyxial death. For example, in Pediatric Forensic Pathology: Limits & Controversies, Dr. Cordner describes the use pathologists make of general signs of mechanical asphyxia:

> In relation to the various forms of mechanical asphyxia, some weight is attached in some circumstances to its general signs. These are:

> 1. Petechial hemorrhages: These may occur on the face, on the conjunctivae (the thin coverings of the eye and lining of the inner aspects of the eyelids); behind the ears; over the larynx at the back of the throat; on the inner aspects of the lips.
>
> 2. Facial congestion, especially if there is a demarcation above and below the level of compression (of the neck, for example).
>
> Other signs have been referred to by numbers of authors, but suffer from confusion with a broader conception of asphyxia, which as we have seen is not sustainable. These other signs include: pleural and epicardial petechiae; cyanosis; fluidity of the blood post-mortem.
>
> Sometimes these general signs are ascribed significance when seen in association with specific signs of, for example, compression of the neck by a ligature (e.g., the ligature mark itself encircling the neck, possible abrasions adjacent to the ligature mark suggesting attempts by the victim to loosen or remove it, possible other sings of assault)….Thus, what might be regarded as general and non-specific signs acquire some value in association with specific signs of, in this case, compression of the neck.
>
> **Reference:** Cordner, "Pediatric Forensic Pathology", PFP301639, at p. 88

496. Likewise, in an article written by Dr. Pollanen, published in 2001, Dr. Pollanen acknowledges the diagnostic quandary many pathologists are faced with when presented with non-specific, general findings consistent with an asphyxial mode of death and provides the following illustration:

> The nude body of a 20 year old woman is found on a bed in a motel room. The scene is not disturbed but the door is not secured. On inspection, there are multiple petechiae of the conjunctivae. At autopsy, petechiae are also present on the surfaces of the heart and lungs, and on the laryngeal mucosa. There is persistent fluidity of the blood in the cardiac chambers and great vessels, congestion and oedema of the lungs, and the urinary bladder is devoid of urine. A separate layer-by-layer dissection of the neck reveals no injuries to the strap muscles, larynx or hyoid bone. No natural disease is present and toxicological studies reveal no exogenous compounds.
>
> **Reference:** Pollanen, "Neck Compression", PFP032700, at p. 1

497. Dr. Pollanen's remarks in the article about how this case might be approached by forensic pathologists are telling in a number of ways. First, he acknowledges that the presentation "raises the possibility of an asphyxial death" in that the objective evidence listed in the case synopsis is "consistent with an asphyxial death". It is clear that Dr. Pollanen has associated general or non-specific findings with an asphyxial death, just like Dr. Smith did in many of the asphyxia cases before the Commission:

> Although many pathologists recognize consistent postmortem signs in asphyxial deaths, the non-specificity of these signs has precluded scientific work aimed at defining the criteria of rapid anoxial deaths.
>
> **Reference:** Pollanen, "Neck Compression", PFP032700, at p. 2

498. Dr. Pollanen goes on to note that while many pathologists would certify the cause and manner of death in this example as unascertained, Dr. Pollanen acknowledges that some pathologists would certify the death as homicide, "based more on the scene examination and circumstances of the case than the relatively negative autopsy findings". Obviously, the diagnosis of asphyxia using circumstantial evidence was not unique to Dr. Smith.

> **Reference:** Pollanen, "Neck Compression", PFP032700, at p. 2

499. As will be clear from a review of the individual cases below, in all of the asphyxia cases, Dr. Smith had circumstantial evidence supporting an asphyxial mode of death, together with general autopsy findings that were at least consistent with an asphyxial mode of death. In some cases, there were also specific findings consistent with a particular mechanism of asphyxia.

500. As such, it appears Dr. Smith's error was primarily one of omission – he did not state the mechanism of asphyxia or explain the basis for his finding of asphyxia in his post mortem report. In light of the evidence before the Commission on the style of autopsy reports in Ontario in the 1980s and 1990s, this omission can be attributable to the culture of pathology, not to a failing of Dr. Smith's.

7.02 TAMARA

7.02(1) Post Mortem Examination

501. Dr. Milroy was critical of Dr. Smith's alleged failure to take genital swabs.

> **Reference:** Medico-Legal Report, PFP135457, at p. 5

502. The Coroner's Warrant in this case made note of potential bleeding from the anus. It is agreed that in view of this information, it would be appropriate to take an anal swab.

Reference: Warrant for Post Mortem Examination, PFP101047

503. The records demonstrate that Dr. Smith did take an anal swab during the post mortem examination and submitted it to the Centre for Forensic Science for analysis. That analysis revealed no evidence of semen. It does not appear Dr. Milroy was provided with the CFS analysis performed on the anal swab.

Reference: Report, PFP052204, at p. 1
Medico-Legal Report, PFP135457, at p. 3

504. In view of the record, Dr. Smith submits that there is simply no evidence that he failed to take appropriate samples during the post mortem examination.

7.02(2) Cause of Death

505. Dr. Smith found non-specific signs of asphyxia during the course of his post-mortem examination. Dr. Smith also found injuries that could point to the mechanism of asphyxia, but nothing diagnostic of the mechanism. Finally, he found a number of additional acute injuries and old injuries, many of which were strongly suggestive of abuse in the opinion Dr. Smith and other medical specialists including a radiologist (Dr. Williams) and a child abuse specialist (Dr. Huyer).

Reference: Report of Dr. Babyn dated 05/04/1999, PFP081585
Report of Dr. Williams dated 10/02/1999, PFP012578
Opinion of Dr. Huyer dated 29/07/1999, PFP081473
Medico-Legal Report of Dr. Milroy, PFP135457

506. The findings, taken together, led all the pathologists (Dr. Smith, Dr. Dowling, Dr. Ferris and Dr. Milroy) to conclude that Tamara's death was caused by some interference with her respiration. Further, Drs. Dowling and Milroy expressed a view that the mechanism of asphyxia was likely an upper airway obstruction.

Reference: Post Mortem Report, PFP012527
Dr. Smith's Preliminary Hearing Evidence, PFP071289, at pp. 41-42
Dr. Smith's Preliminary Hearing Evidence, PFP012802, at pp. 27-29
Opinions of Dr. Dowling, PFP013016 and PFP081594
Opinion of Dr. Ferris, PFP081605
Medico-Legal Report of Dr. Milroy, PFP135457

507. Given the opinions of Drs. Dowling and Milroy, it is abundantly clear is that it was reasonable for Dr. Smith to hold the opinion that Tamara's likely cause of death was some form of asphyxia.

508. Dr. Dowling concluded:

> Like Dr. Smith, I am very concerned that Tamara died as a result of some form of mechanical or obstructive asphyxia. Dr. Ferris indicates that there is no definitive evidence to support the conclusion that Tamara died as a result of smothering or neck compression. The difficulty with deaths due to smothering, neck compression, or other forms of asphyxia in infants is that there rarely is any definitive evidence of these injuries. Pathologists are faced with making a diagnosis by the exclusion of other possibilities, as opposed to being able to identify direct evidence of the cause of death. . . . The best that I am able to do, as a Pathologist, is express my concern that I do not see a clear cut underlying cause of death, and in particular that I see no clear cut evidence of any natural disease process to account for death; therefore an asphyxial mechanism of death, which includes underlying causes of death like smothering, neck compression, and chest compression, becomes a distinct possibility.
>
> . . .
>
> As I have mentioned, the best a Pathologist can do in a case like this is indicate a concern and high degree of suspicion that this death was not due to any natural disease and that an asphyxial cause and mechanism of death is either a distinct possibility or the only reasonable possibility. This concern and suspicion is heighten by the presence of several injuries that appear to be of varying ages – many of which are highly suspicious for having been caused by non-accidental trauma.

Reference: Opinions of Dr. Dowling dated June 7, 2001, PFP081594, at pp. 10-11

509. Dr. Milroy testified:

> A child of this age with no -- no positive findings. You've -- you've got to -- you've got a child that's injured, that's been injured on a number of occasions pointing to child abuse. And you have a -- this frenular injury, which again is very suspicious. And when you begin to put all of these things, I think it's -- it provides -- it would provide strong support, but it wouldn't -- you -- you can't state - - I still don't believe you can state the cause of death. You have to put the alternative, and I think that of the alternatives that the strongest is for the upper airway obstruction.

Reference: Evidence of Dr. Milroy, 21/11/2007, p. 38, line 17 to p. 39, line 4

510. While Dr. Smith's conclusion that Tamara's cause of death was asphyxia may not have been expressed in his post mortem report as completely as Drs. Dowling and Milroy, it was not

misleading in any way and did not arise from a misinterpretation or over-interpretation of the findings on post mortem examination. Instead, he reached it on the basis of all of the evidence, just as Drs. Dowling and Milroy did.

511. Dr. Chiasson, who reviewed Dr. Smith's post mortem report did not have any concerns with Dr. Smith's expression of the cause of death in his post mortem report.

> **Reference:** Forensic Pathology Case Review dated September 3, 1999, PFP052201
> Evidence of Dr. Chiasson, 12/11/2007, p. 55, line 6 to p. 56, line 16

512. It is also worth noting that the opinion of the defence pathologist, Dr. Ferris, that Tamara died from aspiration pneumonia was rejected by all of Drs. Milroy, Dowling and Smith. All gave evidence that aspiration in a healthy child was very unlikely and both Drs. Milroy and Dowling rejected the notion that Tamara had developed pneumonia.

> **Reference:** Evidence of Dr. Milroy, 21/11/2007, p. 31, lines 10 to 13 and p. 202, lines 3 to 6
> Opinion of Dr. Dowling dated June 7, 2001, PFP081594, at p. 9
> Dr. Smith's Preliminary Hearing Evidence, PFP071289, at p. 69

513. Finally, Tamara's father pleaded guilty to manslaughter. The agreed statement of facts set out the circumstances in which Tamara died:

> [Tamara's father] admits that he fed Tamara at first from a bottle left by [Tamara's mother], but that the baby seemed still to be hungry. He tried to get her to eat more, but she wouldn't take the bottle. Becoming increasingly frustrated, he added chocolate flavouring to the bottle, but still she was crying and resisting. He began to force the bottle violently into her mouth as she choked and vomited. He used sufficient force to cause the injuries to the face, mouth and neck seen later, although neither he nor the Crown knows in fact if they were caused then or during resuscitation attempts later.
>
> . . .
>
> Ultimately, [Tamara's father], angry and frustrated, left the child knowing she was in distress, and went to the next room. He was there when [Tamara's mother] returned home. By that time Tamara was already deceased.
>
> . . .
>
> Dr. Charles Smith of the Hospital for Sick Children performed an autopsy on February 9, 1999. He found evidence of several injuries, but no anatomical cause of death. In particular as they related to the cause of death, he found:

A facial bruise and a small tear to the frenulum, inside the upper lip

A deep hemorrhage to the left sternomastoid muscle, not externally visible

Pulmonary hemorrhages consistent with asphyxiation

After a more detailed analysis, Dr. Smith ruled the death to be a result of asphyxia.

Reference: Agreed Statement of Facts, PFP100998

7.02(3) Dr. Becker's Neurological Examination

514. Dr. Smith sought and obtained a report from Dr. Becker with respect to his examination of the brain tissue. The findings from that report were included in Dr. Smith's post mortem report without attribution.

Reference: Autopsy Central Nervous System Procedure Report, PFP012550
Post Mortem Report, PFP012527

515. The only guidance provided on reliance on consultations at that time required written consultation opinions be obtained if the opinions were necessary to opine on cause of death.

Reference: Forensic Pathology Pitfalls, April 12, 1999, PFP007950, at p. 3

516. There is no evidence that Dr. Becker's opinion was necessary for Dr. Smith (or any of the other experts) to opine on cause of death. Even assuming it was, Dr. Smith's conduct in obtaining a written consultation from Dr. Becker was in compliance with the guidelines in place at the time.

517. No guidance had been provided by OCCO on what was to be done with those written consultations, whether or not they were relevant to the determination of the cause of death.

518. Nonetheless, Dr. Smith provided a copy of Dr. Becker's report to the Court at the preliminary hearing

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP012802, at p. 35

519. In these circumstances, Dr. Smith's failure to attribute the findings to Dr. Becker results from the casual manner in which consultations were obtained and included in reports rather than any attempt to conceal Dr. Becker's involvement.

7.02(4) Issuance of Post Mortem Report

520. Tamara died on February 8, 1999 and Dr. Smith performed the post mortem examination on February 9, 1999.

Reference: Post Mortem Report, PFP012527

521. The final report from the Centre for Forensic Sciences is dated August 27, 1999. This report contains the analysis of the anal swab taken from the post mortem examination.

Reference: Report of the Centre for Forensic Sciences, PFP052204

522. Dr. Smith signed his post mortem report on September 9, 1999, one week later and exactly seven months after the post mortem examination. The report was reviewed by Dr. Chiasson by September 3, 1999, which suggests it was completed for review by at least that date.

Reference: Post Mortem Report, PFP012527, at p. 16
Forensic Pathology Case Review, PFP052201

523. Dr. Smith's completion of his report within one week of receipt of the CFS report was timely and in any event, a seven-month turnaround time was not unusual.

Reference: See Section 4.02(3)

7.03 BABY M

524. Two challenging pathological issues are raised by the Baby M case:

(a) Was Baby M born alive?

(b) If so, what was Baby M's cause of death?

7.03(1) Live Birth

525. It appears to now be accepted that Dr. Smith's opinion that Baby M was born alive was reasonable. Dr. Jaffe, retained by the defence to review the case, confirmed that the evidence supported the conclusion that Baby M had breathed for several minutes. Additionally, both Dr. Pollanen and Dr. Butt have acknowledged that there was sufficient evidence from the post mortem examination to reach such a conclusion.

Reference: Report of Dr. Jaffe, PFP001743
Evidence of Dr. Pollanen, 05/12/2007, at p. 101, line 19 to p. 102, line 24
Evidence of Dr. Butt, 20/11/2007, p. 102, lines 4 to 6

7.03(2) Cause of Death

526. Baby M was found in a toilet in his mother's home. This is not a typical location in which to find a newborn baby.

Reference: Evidence of Dr. Pollanen, 05/12/2007, at p. 98, lines 2 to 19

527. The pathological findings in the Baby M case were consistent with asphyxia, and were the findings that would be expected if Baby M had drowned in the toilet where he was found by paramedics.

Reference: Post Mortem Report, PFP001745
Statement of Mr. Piggot, PFP036465

528. Dr. Jaffe provided his opinion that drowning and umbilical cord compression were both potential mechanisms of death and confirmed that the pathological findings of cyanosis and petechial heamorrhages supported Dr. Smith's opinion that asphyxia was the cause of death.

Reference: Report of Dr. Jaffe, PFP001743

529. As stated above, it is apparent that reasonable pathologists do rely on circumstantial information, including the circumstances in which a body is found, in arriving at a conclusion about

the cause of death (See Section 4.03(2)). In this case, the pathology findings, while non-specific, were precisely the findings that would be expected in a drowning death of a newborn and there was no other possible cause of death found despite a complete autopsy.

530. In these circumstances, it was reasonable for Dr. Smith to arrive at the cause of death that he did based on the non-specific findings of asphyxia together with circumstances in which Baby M was found.

7.03(3) Post Mortem Report

531. With respect to Dr. Smith's use of the term infanticide in his post mortem report, he included it in parenthesis to reflect that he could not confirm the information based on pathology alone but it was supported by all of the available evidence. This use of parenthesis was a known convention in Ontario and while it might technically be the role of the coroner to make the ultimate determination on manner of death, it is clear that it was not uncommon for the manner of death to be alluded to in post mortem reports.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 106
Evidence of Dr. Chiasson, 10/12/2007, p. 84, line 2 to p. 87, line 11

532. Additionally, Baby M's mother did admit to the police on November 9, 1992 (prior to completion of Dr. Smith's post mortem report) that Baby M was not born directly into the toilet and, instead, she placed him there. She eventually pleaded guilty to manslaughter prior to any preliminary hearing and received a suspended sentence.

Reference: Statement of Baby M's mother, PFP036303, at p. 35
Post Mortem Report, PFP001745
Article, *Suspended sentence in child's death*, PFP036236, at p. 2

7.04 BABY F

533. The same two challenging pathological issues are raised by the Baby F case:

(a) Was Baby F born alive?

(b) If so, what was Baby F's cause of death?

7.04(1) Live Birth

534. Dr. Smith concluded that Baby F was born alive based on the air found in Baby F's stomach and lungs

Reference: Consultation Report, PFP009917

535. Dr. Walsh, who performed the original post mortem examination also reached the conclusion that Baby F was born alive.

Reference: Post Mortem Report of Dr. Walsh, PFP009911, at p. 5

536. While Dr. Butt testified that, in his opinion, the evidence in this case made it difficult to determine whether Baby F was born alive, both Dr. Pollanen and Dr. Chiasson testified that there was sufficient pathological evidence for Dr. Smith to reach that conclusion.

Reference: Evidence of Dr. Butt, 20/11/2007, p. 120, line 8 to p. 124, line 18
Evidence of Dr. Pollanen, 05/12/2007, at p. 101, line 19 to p. 102, line 24
Evidence of Dr. Chiasson, 10/12/2007, p. 90, lines 20 to 24

537. Additionally, despite legal advice to Baby F's mother to obtain an expert opinion on whether Baby F was born alive prior to pleading guilty to infanticide, there is no evidence that she elected to do so.

Reference: Instructions to Lawyer dated July 6, 1998, PFP304373, at p. 2

7.04(2) Cause of Death

538. Baby F was found inside plastic bags in her mother's closet. This is not a typical location in which to find a newborn baby.

Reference: Evidence of Dr. Pollanen, 05/12/2007, at p. 98, lines 2 to 19

539. The pathological findings in the Baby F case while non-specific for asphyxia, were the findings that would be expected if Baby F had suffocated inside the plastic bags where she was found by the coroner.

Reference: Coroner's Investigation Statement, February 10, 1997, PFP009865

540. Baby F's mother admitted under hypnosis to placing Baby F inside plastic bags.

Reference: Report of Dr. Bloom, PFP010942, at p. 12

541. Dr. Chiasson testified that he understood Dr. Smith's reasoning process to arrive at asphyxia as the cause of death:

> MS LINDA ROTHSTEIN: Now, if we look under the heading, at paragraph -- under the heading discussion, which is excerpted in paragraph 39. To be fair to Dr. Smith, he can be seen to be making the point you have about the ambiguity when he says:
>
> "The exact means by which the asphyxia was induced could not be determined on review of these materials."
>
> But in the last sentence he concludes:
>
> "In the absence of an alternative explanation, the death of this baby girl is attributed to infanticide."
>
> And Dr. Butt was -- I think I fairly summarized his evidence, in saying very critical of that logic, if you will.
>
> What do you say about that, Dr. Chiasson?
>
> DR. DAVID CHIASSON: Well, somebody that now has to deal with this kind of issue in a day-to-day point of view, it -- it's a difficult situation. And the way I would deal with it now is different than the way Dr. Smith has -- had dealt with it. But, you know, I -- I see the basis for his -- his reasoning. We have someone, an infant – and the -- the important point here is that the evidence does support that the infant was live born. The evidence doesn't support any sign of intrauterine distress and, therefore, most infants that are born and -- and are live born, you'd expect to survive. And if they're not –
>
> MS LINDA ROTHSTEIN: Well, actually I think Dr. -- to be fair, we don't have photos and so when I was going to ask you about that -- and you may not recall the details of this case, but Dr. Butt was pretty clear that there was an issue of a clot in the photos that wasn't fully developed, and there was an issue with respect to the placenta encircling the neck of the fetus.
>
> So I'm not sure that Dr. Butt was satisfied, as I understand his evidence, that one could exclude some potential issue for the fetus.
>
> DR. DAVID CHIASSON: Yes. No, I -- and I -- I do recall that; you made a point. Cord around the neck is a very common situation –
>
> MS LINDA ROTHSTEIN: Okay.

> DR. DAVID CHIASSON: -- and it's – the vast majority of times is not an explanation for a – a infant death. The issue of a clot in -- in abruptio placenta does raise issues, but, in fact, again you go back to the pathology in the infant, there is nothing.
>
> So I mean, we're -- we're in a gray area here, and I respect Dr. Butt, and he's looking at as the -- from -- from his perspective. And I think there is a debate that could be engendered regarding live birth versus stillborn. On the preponderance of the evidence I read -- read it, I think it -- that Dr. Smith's conclusion as to live birth is a reasonable one.

Reference: Evidence of Dr. Chiasson, 10/12/2007, p. 89, line 25 to p. 92, line 3 [emphasis added]

542. As stated above, reasonable pathologists do rely on circumstantial information, including the circumstances in which a body is found, in arriving at a conclusion about the cause of death (See Section 4.03(2)). In this case, the pathology findings, while non-specific, were precisely the findings that would be expected if a living newborn baby was placed inside a plastic bag. In Dr. Smith and Dr. Chiasson's view, there was no other plausible explanation for Baby F's death despite a complete autopsy.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 49

543. In these circumstances, it was reasonable for Dr. Smith to arrive at the cause of death based on the non-specific findings of asphyxia together with circumstances in which Baby F was found.

7.04(3) Post Mortem Report

544. Baby F's mother eventually pleaded guilty to infanticide and was sentenced to a two-month conditional sentence, three years probation and 150 hours of community service.

Reference: OPP Tracking, PFP009860
Referral Intake Probation, PFP065882

545. With respect to Dr. Smith's use of the term infanticide in his post mortem report, he included it in parenthesis to reflect that he could not confirm the information based on pathology alone but it was supported by all of the available evidence. This use of parenthesis was a known convention in Ontario and while it might technically be the role of the Coroner to make the ultimate determination on manner of death, it is clear that it was not uncommon for the manner of death to be alluded to in

post mortem reports. When Dr. Chiasson reviewed Dr. Smith's report at the time it was prepared, he did not ask Dr. Smith to remove or modify that reference.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 106
Forensic Pathology Case Review dated February 13, 1997, PFP009848
Evidence of Dr. Chiasson, 10/12/2007, p. 84, line 2 to p. 87, line 11

546. With respect to the clot on the placenta and the umbilical cord encircling Baby F's neck, it is not apparent that Dr. Smith was provided with the placenta or any photographs. It is therefore understandable that he did not reference those findings in his report as he did not observe them nor did he find any evidence that would suggest any intra-uterine distress.

7.05 DELANEY

7.05(1) Cause of Death

547. In this case, there was no real dispute about the cause, mechanism or manner of death.

548. Delaney's mother confessed to killing Delaney on the day Delaney was pronounced dead (and the day before Dr. Smith performed the post mortem examination).

Reference: Statement of Cst. Ashman, PFP064999, at p. 20
Post Mortem Report, PFP002507, at p. 1

549. Delaney's mother later told a nurse at the London Psychiatric Hospital that she had put her hand down Delaney's throat three times to kill him.

Reference: Statement of Susan Garton, PFP065566, at p. 96-7

550. This information was given to Dr. Smith prior to his completion of the post mortem report.

Reference: Statement of Sgt. Fraser, undated, PFP064999, at p. 62
Final Autopsy Report, PFP002402

551. This circumstantial information gave context to the findings at autopsy which included a finding of an injury inside Delaney's throat and non-specific signs of asphyxia.

Reference: Post Mortem Report, PFP002507, at p. 2, 3 and 4

552. It is apparent that reasonable pathologists do rely on circumstantial information, including confessions, in arriving at a conclusion about the cause of death or the significance of particular findings (See Section 4.03(2)). In this case, the pathology findings, some of which are non-specific, the other which is an apparent injury to the inside of Delaney's throat, were findings that would be expected in a death resulting from digital airway obstruction. There was no other apparent cause of death found despite a complete autopsy including toxicology.

Reference: Post Mortem Report, PFP002507, at p. 2

553. Further, in this case, Dr. Smith did provide the mechanism (albeit in parentheses) of the asphyxia. In these circumstances, it was reasonable for Dr. Smith to arrive at the cause of death based on the non-specific findings of asphyxia as well as a specific finding together with a history that provided a reasonable explanation for those findings.

Reference: Post Mortem Report, PFP002507

554. Notwithstanding Prof. Saukko's criticisms of Dr. Smith, Dr. Pollanen's initial view was that there were "no substantive medical issues" with this case and after the review, stated that this case raised issues of "nomenclature".

Reference: Preliminary Observations on Smith Cases for External Review, PFP032579, at p. 5
Pollanen, "Systemic Issues", PFP301189, at p. 7

7.05(2) Autopsy Samples

555. Prof. Saukko suggested that Dr. Smith did not take a sample of the epiglottis where the throat injury was apparently seen microscopically. Prof. Saukko did, however, see some evidence of detachment in the microscopic slides of the trachea which he attributed to post mortem decomposition or manipulation. Dr. Smith explained that the slide Prof. Saukko referred to as being

from the trachea is the slide Dr. Smith referred to as being from the epiglottic region. Further, Dr. Smith remains of the view that, particularly in light of the history provided, the disruption seen can be explained by peri-mortem injury and he does not interpret it as an artefact (See Section 3.01).

Reference: Medico-Legal opinion of Prof. Saukko, PFP135429, at p. 7
Dr. Smith's Written Evidence, PFP303346, at p. 50

556. While Dr. Smith did use the expression "filicide by mother" in parentheses in the internal HSC Final Autopsy Report, that expression is not found in his post mortem report.

Reference: Final Autopsy Report, PFP002402
Post Mortem Report, PFP002507

7.06 KATHARINA

7.06(1) Cause of Death

557. In this case, there was no real dispute about the cause, mechanism or manner of death from the outset of the case: on the day Katharina was discovered, September 15, 1995, Katharina's mother confessed to smothering her with a pillow.

Reference: D/Cst. Robert Shaw's Willsay, undated, PFP060259, at p. 14-15

558. This confession was repeated to a guard at the Metro West Detention centre on September 24, 1995.

Reference: Occurrence Report, PFP060775, at p. 5

559. The confession was relayed to Dr. Smith. The confession provided circumstantial information to explain the findings at autopsy which were the expected findings with a slow suffocation with a pillow.

Reference: Final Autopsy Report, PFP007594

560. Notwithstanding Dr. Butt's criticisms of Dr. Smith, Dr. Pollanen's initial view was that there were "no substantive medical issues" with this case and after the review, stated that this case raised issues of "nomenclature".

Reference: Preliminary Observations on Smith Cases for External Review, PFP032579, at p. 9
Pollanen, "Systemic Issues", PFP301189, at p. 7

561. It is apparent that reasonable pathologists rely on circumstantial information, including confessions, in arriving at a conclusion about the cause of death (See Section 4.03(2)). In this case, the pathology findings, while non-specific, were precisely the findings that would be expected in a smothering death and there was no other possible cause of death found despite a complete autopsy including toxicology.

562. In these circumstances, it was reasonable for Dr. Smith to arrive at the cause of death based on the non-specific findings of asphyxia together with a history that provided a reasonable explanation for those findings.

7.06(2) Post Mortem Report

563. Dr. Butt was also critical of Dr. Smith for allegedly failing to properly explore certain marks on the side of Katharina's neck. However, Dr. Butt then testified that those marks would not form a sufficient basis to diagnose neck compression. It is therefore a criticism with no implications to the case.

Reference: Medico-Legal opinion of Dr. Butts, PFP135508, at p. 5
Evidence of Dr. Butt, 21/11/2007, p. 8, line 23 to p. 9, line 6

564. Further, there is no evidence that the marks were not explored as part of the neck dissection described in section 4(2) of Dr. Smith post mortem report.

Reference: Post Mortem Report, PFP007583, at p. 3

565. With respect to Dr. Smith's use of the term filicidal in his post mortem report, he included it in parenthesis to reflect that he could not confirm the information based on pathology. This use of parenthesis was a known convention in Ontario and while it might technically be the role of the coroner to make the ultimate determination on manner of death, it is clear that it was not uncommon for the manner of death to be alluded to in post mortem reports.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 106
Evidence of Dr. Chiasson, 10/12/2007, p. 84, line 2 to p. 87, line 11

7.06(3) Evidence at the Preliminary Hearing

566. The only issue to be determined in this case was not whether or how Katharina's mother had killed Katharina, but when she had done so. The timing might have been relevant to her criminal responsibility, the only issued raised by the defence.

567. To this end, defence counsel asked Dr. Smith about the process of rigor mortis. Dr. Smith testified as follows:

> Q. All right. Rigor mortis, can you explain when, with a child of three years old, this child's weight, when would you expect rigor mortis to set in and when would you expect it to cease?
>
> A. Well, it's variable, that's statement number one. Number two, I'm not aware of any good studies on rigor mortis in children. Most of the statements that are made are always made in reference to adults.
>
> Having said that I can help you a little bit and you understand that it's not an exact science.
>
> Q. No, I appreciate that.
>
> A. But rigor mortis can set in usually within several hours of death. Now, it begins to set in in the small muscles around the eyes and the mouth and then slowly continues downward to affect the whole body and will reach a maximum in perhaps six or eight or ten or twelve hours depending to a large degree on body temperature, and then there's many other variables as well.
>
> Because you understand rigor mortis is actually a chemical reaction and so the rate of that chemical reaction is dependant on temperature and if a body is warmer then the reaction generally will start sooner and end sooner.
>
> Rigor mortis will disappear and it disappears in the same way that it appears, start at the top and work down, and it can disappear in as little as the 12 hour mark but in my experience it's more likely to be the 24 hour mark by which time it would have disappeared from the extremities, from the arms and legs. Of course the legs are going to be where it's easiest to notice it, or easiest to evaluate it.
>
> Q. And the legs, the rigor mortis, the cessation of rigor mortis would be complete when it finished at the legs.

A. That's right, yes, that's right.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP061597, at pp. 124-125

568. Dr. Butt criticized this evidence as follows:

> But in terms of this particular case, I mean, what was recorded here by Dr. Smith in his testimony on cross-examination -- this was not in the autopsy report -- was a -- a couple of statements about how rigour mortis develops, and I quote: "It begins to set in the small muscles around the eyes." That means it begins to be featured in small muscles around the eyes and the mouth, and then slowly continues downward which I assume means, exactly as it says, inferiorly as we say in the lexicon of medicine "To affect the whole body". But this is incorrect. That is not the way rigour mortis is established. It is established in the smaller muscles first and then the larger muscles latterly. And it has nothing to do with the condition of the body top to bottom, so to speak. So this is -- if I may, this is of concern because it's very basic information that one (1) would expect a medical student to have a good grasp on.

Reference: Evidence of Dr. Butt, 21/11/2007, p. 16, line 11 to p. 17, line 4

569. However, it bears noting that the small muscles are in the face, the next larger muscles in the arms and the largest muscles in the legs and hips. Therefore, it follows that from a lay person's perspective rigor mortis does start at the top of the body and move downward to the legs. As articulated by Dr. Jaffe in his textbook, A Guide to Pathological Evidence For Lawyers and Police Officers:

> Rigor Mortis
>
> . . .
>
> Distribution
>
> . . .
>
> First observed in the face and jaw, then in the upper limbs, last in hips and legs. Disappears in the same sequence. This anatomical sequence has been attributed to differences in muscle mass.

Reference: F. Jaffe, *A Guide to Pathological Evidence*, 4th Ed (Carswell:Toronto, 1999), PFP303518, at p. 3

570. It is apparent that rather than appreciating that Dr. Smith's evidence was an attempt to make the science understandable for lay witnesses by describing it as moving from top to bottom (head to legs) Dr. Butt uncharitably concluded that Dr. Smith lacked the basic information a medical student

would know. This interpretation was and is fundamentally unfair to Dr. Smith and reflects a general bias on the part of the reviewers to criticize Dr. Smith when in doubt about the basis for his opinion.

7.07 JOSHUA

7.07(1) Cause of Death

571. Dr. Smith testified that his diagnosis of asphyxia as the cause of Joshua's death was founded had three evidentiary bases:

(a) Non-specific findings of petechial hemorrhages in the thymus, pulmonary pleura and epicardium;

(b) Specific microscopic finding of hemorrhage in the connective tissue of the neck; and

(c) Evidence from the police that a month prior to Joshua's death, his mother attended the Trenton Memorial Hospital where she advised medical staff that she was afraid she would kill her baby by smothering him.

Reference: Dr. Smith's Written Evidence, PFP300346, at p. 63
Evidence of Dr. Smith, 28/01/2008, p. 95, lines 7 to 17

572. As stated in Section 7.01, in the 1990s, a diagnosis of asphyxia was considered appropriate if there were non-specific findings consistent with an asphyxial mode of death and either specific findings or circumstantial evidence to explain the mechanism of the asphyxia. In this case, Dr. Smith had general findings consistent with asphyxia and both specific findings and circumstantial evidence consistent with neck compression or suffocation.

573. With the benefit of hindsight, Dr. Smith acknowledges that the circumstantial evidence he considered was insufficiently reliable as evidence about how Joshua died given that it referred to events that occurred four weeks prior to Joshua's death. However, at the time, there was no bright line to determine what kind of circumstantial evidence could be relied upon.

Reference: Dr. Smith's Written Evidence, PFP300346, at p. 63
Evidence of Dr. Smith, 28/01/2008, p. 96, lines 8 to 11

574. Moreover, there were no known diagnostic criteria for neck compression and pathologists were left to their own discretion as to when to make the diagnosis based on findings such as neck hemorrhage.

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 68, line 7 to p. 69, line 21
Pollanen, "Neck Compression", PFP032700, at p. 1

575. With the benefit of hindsight, Dr. Smith acknowledged that what he saw as neck hemorrhage was more likely a post mortem artefact. He testified that at the time of the post mortem examination, he was aware of the possibility of creating artefacts when undertaking neck dissections. However, it was his practice to use a dry dissection technique designed to minimize or eliminate artefacts. In retrospect, Dr. Smith admitted that he was unduly confident in his dry dissection technique and skill and, in result, may have failed to adequately consider the possibility of artefact.

Reference: Dr. Smith's Written Evidence, PFP300346, at p. 63
Evidence of Dr. Smith, 28/01/2008, p. 96, line 12 to p. 98, line 3

576. However, in light of the evidence at this Commission that pathology findings are interpretive, that there has been a dearth of research undertaken on post mortem artefacts and that post mortem artefacts are pitfalls to which even the wary can fall prey, Dr. Smith's apparent misinterpretation was reasonable.

Reference: See Section 3.01

7.07(2) Skull Fracture

577. Dr. Smith acknowledged that he was in error in interpreting the histology of the skull to demonstrate evidence of a healing fracture. With the benefit of hindsight, he accepted the testimony of others that the slide more likely represents evidence of a developing cranial suture.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 67
Evidence of Dr. Smith, 28/01/2008, p. 99, line 13 to p. 100, line 1

578. However, Dr. Smith's misinterpretation is mitigated by the evidence of Dr. Pollanen that literature, largely published after Dr. Smith was involved in the Joshua case, reports that the developing cranial suture can look "strikingly similar" to a healing skull fracture due to similar biological processes.

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 63, lines 5 to 23 and p. 65, lines 2 to 15
Consultation Report of Dr. Pollanen, PFP008802, at p. 12

579. That Dr. Smith may have simply been a victim of insufficient scientific understanding at the time is demonstrated by the fact that Dr. Jaffe, the pathologist consulted by Joshua's mother, also interpreted the slide as revealing a skull fracture, not a suture. If this was such an easy interpretation, it is unlikely that both Drs. Jaffe and Smith would have made the same diagnostic error.

Reference: Memorandum to File of Bruce Hillyer, PFP174312, at p. 5
Evidence of Mr. Hillyer, 08/02/2008, at p. 153, line 24 to p. 154, line 12 and p. 217, line 9 to p. 220, line 7

580. It should be noted that Dr. Smith did concede in his testimony at the preliminary hearing that what he considered to be a skull fracture could in fact be a variation of a normal suture in an infant. As Dr. Pollanen noted, Dr. Smith's testimony on the issue was "almost there" which is remarkable in light of the fact that this knowledge was not yet widely understood or known.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP062608, at p. 23
Evidence of Dr. Pollanen, 06/12/2007, at p. 62, lines 3 to 19

7.07(3) Ankle Fracture

581. Dr. Smith found evidence of a healing avulsion fracture of the left tibia on post mortem examination. This fracture was also seen radiographically.

Reference: Post Mortem Report of Dr. Smith, PFP008524, at p. 6
Radiology Report, PFP008653, at p. 1
Radiology Report, PFP008508 at p. 1

582. This finding was confirmed by Dr. Crane who described it as follows:

> The significant worrying finding in this case is a metaphyseal fracture of the lower end of the left tibia. Such an injury may occur as a result of deliberate abuse, e.g. if the child is lifted and swung by the leg. Such an isolated skeletal injury would necessitate further investigation.

Reference: Medico-Legal Report of Dr. Crane, PFP135527, at p. 5

583. Similarly, Dr. Pollanen found definitive radiographic and histologic evidence of healing metaphyseal fracture of the left distal tibia which he describes as "often found in cases of child abuse".

Reference: Consultation Report of Dr. Pollanen, PFP008802, at p. 14

584. Dr. Jaffe, the defence pathologist, also diagnosed a healing metaphyseal fracture of the left distal tibia, which he described to Mr. Hillyer as "bad news".

Reference: Memorandum to File of Bruce Hillyer, PFP174312, at pp. 9 and 11-14

7.07(4) Evidence at the Preliminary Hearing

585. Although Dr. Smith was clear in his testimony that he did not know for certain how Joshua's asphyxia occurred, he testified at the preliminary hearing that he was "suspicious" that a non-accidental event caused the asphyxia. In this regard, he relied upon: a) the microscopic finding of neck hemorrhage; b) the ankle fracture which is associated with non-accidental injury; and c) the presence of the skull fracture which he testified was "worrisome".

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP062608, at pp. 7 and pp. 13-15

586. However, Dr. Smith offered evidence to qualify his suspicions. Regarding the possibility of head injury associated with the skull fracture, Dr. Smith testified that although the increase in brain weight and the presence of cerebral edema were consistent with asphyxial deaths, the increase in

brain weight was also consistent with resuscitation and the administration of intravenous fluids and that there was no life-threatening cerebral edema.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP062608, at p. 35

587. Even with respect to the neck hemorrhage, Dr. Smith merely stated that it was a disturbing finding that lent support to a suffocation-type death. He acknowledged that the hemorrhage could have been caused with a relatively minimal amount of force in light of the absence of external trauma. More significantly, he admitted that if the mechanism of asphyxia was in fact neck compression, he would have expected to see conjunctival petechiae and that these were not found in the Joshua case. At its highest, Dr. Smith's evidence concerning the neck hemorrhage was as follows:

> I think had I found [conjunctival petechiae], I would be much stronger in, in my opinion that this was a non-accidental situation that led to his death, but in the absence of that finding, I cannot, I cannot assure you that it was non-accidental cause of death, but certainly the presence of the neck hemorrhage is disconcerting.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP062608, at pp. 10 and 30

588. In any event, in light of the evidence heard at the Commission that pathologists have difficulty in communicating different levels of certainty and suspicions, Dr. Smith should not be judged too harshly in this case for conveying his suspicions arising from the pathology evidence.

589. As to the possibility of non-accidental suffocation, Dr. Smith did acknowledge that such an event was possible if the infant was placed in a dangerous or potentially dangerous situation. He included a water bed as an example of a dangerous situation. However, he was not asked by either the Defence or the Crown as to whether or not Joshua's bedding was considered dangerous.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP062608, at p. 6

590. Sgt. MacLellan confirmed that he had discussed this issue with Dr. Smith and that Dr. Smith acknowledged that he could not rule out the possibility that Joshua had accidentally suffocated in his sheets and blankets even if the possibility was extremely unlikely.

Reference: Evidence of Sgt. MacLellan, 24/01/2008, at p. 91, lines 7 to 19

591. In any event, Bruce Hillyer, who defended Joshua's mother in the criminal proceedings testified unequivocally that he was not worried about the medical evidence given by Dr. Smith at the preliminary hearing. Rather, he testified that he had "good level of confidence" that he could address the medical evidence at trial. His concern was his client's credibility:

> I had a good level of confidence on the medical evidence. What I didn't have a good level of confidence on was my client. She was extremely stressed and upset over the events surrounding the death of Joshua … she was - - I won't say irrational but she was - - she was difficult. It was very difficult to sort of communicate effectively with her in a very logical - - logical sense, because she was consumed with - - with all the emotional, - - whether it was guilt in her mind for not having gotten up that night or whether the way the bed was made, or whether it was social pressure that she was – she was getting from the community … at the end of the day, looking forward in the crystal ball, you don't know how a jury is going to perceive something. I've got Doctor - - or I've got Judge Hunter telling me what a great witness this guy is; Jaffe is telling me what a great witness he is … If you see in the material, I had a whole pile of medical stuff I was ready to go at him with, but he didn't – he didn't hurt me in - chief. I just drew a circle around him and left him alone.

Reference: Evidence of Mr. Hillyer, 08/02/2008, p. 161, line 16 to p. 162, line 8 and p. 170, line 12 to p. 172, line 2

7.07(5) Supplemental Report

592. Dr. Smith had already completed his post mortem report when he discovered what he believed to be a skull fracture upon a review of the histological section of the skull.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 65
Evidence of Dr. Smith, 28/01/2008, p. 100, line 18 to p. 101, line 4

593. Shortly thereafter, he advised the Crown who in turn disclosed the finding to the Defence:

> The information I received from Dr. Smith concerning the skull fracture is as follows: He did not see any fracture upon visual inspection of the skull. He was curious about the discolouration noted at the top of page 4 in the post mortem report (dura underlying the right parietal bone). Dr. Smith therefore obtained a sample of the skull in this area for microscopic examination. I understand that the sample was taken near the saggital suture line. It was this sample that revealed a healing skull fracture. He is

unable to describe the size of the fracture, as he only observed a portion of it. Dr. Smith indicated that the degree of healing is such that it could have been caused at birth, if forceps were used.

Reference: Letter to Mr. Hillyer from Ms Walsh, PFP174437, at p. 2

594. There is no evidence that the Defence were surprised by Dr. Smith's evidence, or that they were not given an opportunity to review the histologic slide to confirm the presence of the fracture.

Reference: Applicant's Factum, PFP141676, at p. 3
Evidence of Dr. Smith, 28/01/2008, p. 100, line 18 to p. 101, line 4

595. Dr. Smith acknowledged that he was asked by the Crown to produce a supplementary opinion detailing his finding and that he did not do so. Moreover, he acknowledged that he lacked an appreciation of the importance of disclosure to the Defence of the substance of his opinions and that he ought to have clarified his obligation to produce a supplementary report.

Reference: Dr. Smith's Written Evidence, PF303346, at p. 66

596. However, Dr. Smith testified that it was <u>not</u> his practice to produce supplemental opinions. This evidence is consistent with Dr. Chiasson's testimony who acknowledged that requests for supplemental opinions were rare and that he himself only did them in circumstances when he was requested in writing to do so.

Reference: *Supra*
Evidence of Dr. Chiasson, 11/12/2008, at p. 18, line 13 to p. 19, line 13 and p. 150, line 24 to p. 152, line 2

7.07(6) Advice to Police

597. It is asserted that Dr. Smith gave unreasonable advice to the police regarding the findings at autopsy. In fact, the police notes, together with Sgt. MacLellan's testimony, demonstrate that Dr. Smith's advice to the police was consistent with his ultimate testimony and reasonable in the circumstances.

598. Shortly after the autopsy was completed, Dr. Smith is recorded by the Trenton Police as having stated, in part, the following:

> The mode of death is asphyxial but the question is what caused the asphyxia. Hemorrhages located above and behind the left ear occurred while the baby was alive. A time frame cannot be determined and that it would not take very much force to cause this. Other minor hemorrhages exist on the skull are suspicious. A minor swelling of the brain indicates that the death was not immediate, also states the force used to cause the hemorrhage could also cause the swelling. Unable to state when [ankle] fracture occurred, suggests that it would be unusual for it to occur after death but not impossible. States further tests needed but that it will be unlikely he will ever be able to say exactly when fracture occurred. *Dr. Smith states that the initial findings are consistent with the baby having been smothered but that other causes could not be ruled out.* Due to the unexplained injuries this death cannot be listed as SIDS. [emphasis added]

Reference: Case Outline, PFP008623, at p. 15
Sgt. MacLellan's Notes, PFP128333, at p. 12

599. The Trenton police met again with Dr. Smith on February 8, 1996 at which time Dr. Smith provided additional information to assist the police in their investigation. During that meeting, Dr. Smith is recorded as advising the police of certain factors that are associated with infant death, including dysfunctional family circumstances and psychiatric history.

Reference: Sgt. MacLellan's Notes, PFP128333, at p. 36

600. In light of the evidence at the Commission that there are recognized factors that are associated with infant homicide and Dr. Milroy's evidence that he would offer this information to assist the police in their investigations, Dr. Smith ought not to be faulted for discussing this information with the police. Nor can it be inferred by the way Sgt. Blakely recorded the conversation that Dr. Smith stated that he relied on these factors in determining that Joshua's mother must be responsible for his death. It is more likely Dr. Smith simply offered this information to assist the police in their investigation of Joshua's mother.

Reference: See Section 4.03(3)

601. In fact, Sgt. MacLellan testified that he did not rely on Dr. Smith's statements about the kinds of parents who kill their children. He knew Dr. Smith did not have expertise in the area.

Reference: Evidence of Sgt. MacLellan, 24/01/2008, p. 38, line 20 to p., 39, line 23

602. Nor can it be said that Dr. Smith misled the police and the Crown into believing that the finding of the skull fracture was significant to his opinion. Sgt. MacLellan made it clear that he was under the impression that Dr. Smith did not view the skull fracture as very important.

Reference: Evidence of Sgt. MacLellan, 24/01/2008, p. 180, lines 5 to 14

603. On March 12, 1996, Dr. Smith is recorded as advising Sgt. MacLellan that he was prepared to testify that the physical evidence on autopsy was consistent with Joshua being smothered but that he could not testify that Joshua was smothered for certain.

Reference: Sgt. MacLellan's Notes, PFP128377, at p. 27

604. Shortly after Dr. Smith issued his post mortem report, Joshua's mother was charged with attempted murder for the December 29, 1995 incident and first-degree murder for the January 23, 1996 death of Joshua.

Reference: Sgt. MacLellan's Notes, PFP128377, at p. 39

605. Sgt. MacLellan testified that the decision to charge Joshua's mother was made by the police, in consultation with Crown, Sheila Walsh. Specifically, Sgt. MacLellan stated that the pathology evidence alone was not considered sufficient to lay the charge; rather, the case was considered to be a circumstantial one.

Reference: Evidence of Sgt. MacLellan, 24/01/2008, p. 64, line 24 to p. 66, line 3 and p. 82, line 24 to p. 83, line 14

606. Sgt. MacLellan also acknowledged that he fully understood the limits of Dr. Smith's opinion – that is, he understood that Dr. Smith could not rule out natural causes of Joshua's death. He admitted that based on Dr. Smith's evidence alone, the police would not have charged Joshua's mother.

Reference: Evidence of Sgt. MacLellan, 24/01/2008, p. 179, line 4 to p. 180, line 4

7.07(7) Alleged Reliance on Cultural, Social or Economic Factors

607. There is absolutely no evidence that Dr. Smith inappropriately relied on cultural, social or economic factors to found his pathology opinions in this case.

608. The police notes document a conversation with Dr. Smith during which he apparently advised the police of the psycho-social circumstances associated with infant deaths. Dr. Smith does not deny that he may have discussed these circumstances with the police. However, there is no evidence that he himself relied upon those factors to support his diagnosis. It is more likely that Dr. Smith was simply attempting to assist the police in the very same manner that Dr. Milroy acknowledged he might do in similar circumstances.

Reference: See Section 4.03(3)

7.07(8) Care and Control over Evidence

609. There is no evidence before the Commission that there was any difficulty locating any of the primary material from the autopsy to enable review of this case.

610. The evidence before this Commission is that on February 14, 2006, Dorothy Zwolakowski attended at HSC and picked up 71 microscopic glass slides and 39 photographs.

Reference: Office of the Chief Coroner Case Contact Log, PFP008495

7.08 TIFFANI

7.08(1) Post Mortem Examination

611. Dr. Smith performed a second post mortem examination on Tiffani after it was determined that Tiffani had multiple rib fractures that had not been identified at the first post mortem

examination. Dr. Smith had available to him Dr. Cassidy's preliminary post mortem report, the Warrant for post mortem examination and some of Tiffani's medical records.

Reference: Preliminary Post Mortem Report of Dr. Cassidy, PFP005836
Warrant of Post Mortem Examination, PFP005828
Dr. Smith's Written Evidence, PFP303346, at p. 93

612. At the conclusion of the post mortem examination, Dr. Smith informed the police that Tiffani had failed to thrive and had suspicious injuries (the rib fractures) but that he would need to conduct further analysis before providing an opinion on the cause of death.

Reference: Notes of D/Insp. Smith, July 13, 1993, PFP118841, at p. 11-12
Memorandum from D/Insp. Smith to the Director of the CIB, September 1, 1993, PFP118924, at p. 4

7.08(2) Cause of Death

613. Later that month, Dr. Smith confirmed that there were a total of 8 to 9 rib fractures of varying ages and that the only apparent cause of death was asphyxia.

Reference: Notes of D/Insp. Smith, July 20, 1993, PFP118841, at p. 17

614. In numerous discussions with police and the Crown thereafter, Dr. Smith repeatedly explained that he did not know the precise mechanism of death and that the death could be natural or accidental.

Reference: Notes of D/Insp. Smith, August 17, 1993, PFP118841, at p. 22
Notes of D/Insp. Smith, February 25, 1994, PFP118841, at p. 36
Memorandum from Sheila Walsh to John Woods, March 21, 1994, PFP118909, at p. 7
Memorandum to File from Lee Burgess, February 10, 1995, PFP103645

615. Similarly, while Dr. Smith's report did provide the cause of death as asphyxia, he also included the following caveat in his report:

> Notanda: The autopsy findings point to an asphyxial *mode* of death, *the etiology of which cannot be determined on this examination*. Of note are the present of bilateral, healing rib fractures which, in the absence of an adequate explanation, are considered to be non-accidental in nature. [emphasis added]

Reference: Post Mortem Report, PFP005589, at p. 3

616. In view of this Notanda, it would be clear to any reader that Dr. Smith did not use the term asphyxia to suggest homicide or any particular mechanism of death. This was clear to the Investigating Coroner, Dr. Beattie, who completed a second Coroner's Investigation Statement. He certified the manner of death as "Undetermined" despite being aware of criminal charges against Tiffani's parents.

Reference: Coroner's Investigation Statement, PFP005566

617. Nonetheless, the Crown decided to charge Tiffani's parents with manslaughter in addition to aggravated assault and failure to provide the necessities of life.

Reference: News Release, PFP118905
Will State of D/Cst. Skinner, PFP119686, at p. 2
Warrant for Arrest, PFP119723 and PFP119721

618. It is also worth noting that the Crown considered whether it should retain additional experts including a paediatrician to address natural disease possibilities and accidental suffocation and a child abuse expert to comment on the profile of a child abuser. It does not appear that the Crown ultimately did so.

Reference: Memorandum from Sheila Walsh to John Woods, PFP118909, at p. 8

7.08(3) Production of Post Mortem Report and Supplementary Report

619. Dr. Smith completed his post mortem report on January 17, 1994, approximately six months after he completed the post mortem examination. Dr. Smith acknowledges that this report was somewhat delayed, but in view of the large number of rib fractures (nine) to be reviewed microscopically in an attempt to determine the age of the fractures, this delay was not unreasonable.

Reference: Post Mortem Report, PFP005589

620. With respect to Ms Walsh's request for a supplementary report, this request was unusual (See Section 4.02(4)) and Dr. Smith was advised by OCCO that he was not obliged to produce such a report. In any event, he did so four months after Ms Walsh's initial request. There is no evidence that this four-month delay impacted the case in any significant fashion.

Reference: Email from Sheila Walsh to Edward Bradley, PFP136195
Letter from Dr. Smith to Sheila Walsh, PFP005723

7.08(4) Evidence at Preliminary Hearing

621. Dr. Smith was called by the Crown to give evidence at the preliminary hearing. Dr. Smith testified as follows:

(a) The rib fractures were not related to the cause of death but would have required an event that would have caused the parents to be worried that the infant had suffered an injury (p. 7-9);

(b) That rib fractures are difficult to age (p. 13-15)

(c) That the use of the term "sudden and unexpected death" in his post mortem report indicated that there were significant unanswered questions at the end of the autopsy (p. 11);

(d) That the findings from the post mortem examination can be seen in natural, accidental and non-accidental deaths (p. 11-13);

(e) That Tiffani was substantially underweight but that she did not die from malnutrition (p. 16-18); and

(f) That asphyxia may not be a "clear pathological cause of death" but was more a mode of death and that it may be best to think of Tiffani's cause of death as undetermined which could be natural, accidental or non-accidental (p. 18-19).

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP005543

622. Defence counsel did not cross-examine Dr. Smith at the preliminary hearing.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP005543, at p. 21

623. Dr. Smith's evidence made it abundantly clear, again, that he could not rule out natural or accidental causes of Tiffani's death and, indeed, could not assist with the mechanism of Tiffani's death. In this regard, Dr. Smith's evidence was reasonable.

624. While it appears the defence had retained a pathologist to review the case (Dr. King), he was not called to give evidence at the preliminary hearing. The Commission did not seek production from Tiffani's parents or their counsel and it is therefore unknown what opinion, if any, Dr. King provided.

Reference: Letter from Sheila Walsh to Dr. Smith, PFP005580

7.08(5) Guilty Plea

625. On May 12, 1995, Tiffani's parents pleaded guilty to failing to provide the necessities of life. In view of Prof. Milroy's opinion that Tiffani's cause of death was starvation and Dr. Smith's diagnosis of potential malnourishment, this outcome was in accordance with the pathological findings.

Reference: Memorandum of D/Insp. Smith, PFP118782
Autopsy Report Review Form, December 12, 1006, PFP005542
Post Mortem Report, PFP005589

7.09 KENNETH

7.09(1) Post Mortem Examination

626. Prof. Saukko criticized Dr. Smith for failing to undertake appropriate post mortem toxicology.

Reference: Medico-Legal Report of Prof. Saukko, PFP135429, at p. 5

627. As Kenneth was admitted to hospital for a period of time prior to death and the event leading to his fatal injuries occurred more than three days prior to the post mortem examination, it is apparent that post mortem toxicology would have been of limited value as any substances that might have caused his serious condition would have metabolized.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 73
Evidence of Dr. Shkrum, 18/01/2008, p. 48, line 13 to p. 49, line 6

628. Instead, the results of toxicological screening done at the time of Kenneth's admission would be the only screening of relevance in determining potential causes of death. In this case, such toxicology was done and was negative for any substances that could explain his serious clinical condition that eventually lead to his death.

Reference: PICU Death Report, undated, PFP108270, at p. 1
Opinion of Dr. Huyer, PFP047840, at p. 7

629. In these circumstances, it was reasonable not to complete post-mortem toxicology.

7.09(2) Cause of Death

630. Dr. Smith found non-specific signs of asphyxia during the course of his post mortem examination namely, petechial hemorrhages of the lungs and thymus. Dr. Smith was also aware that Kenneth's mother had provided a history of events that, if true, meant that Kenneth had been suffocated by his bed sheets. Dr. Smith was also aware that Kenneth had suffered from seizure activity in the past which could cause a death from asphyxia (see paragraph 638(n)).

Reference: Post Mortem Report, PFP005902
Final Autopsy Report, PFP005908

631. While Dr. Smith provided asphyxia as the cause of death, it is apparent that the Coroner, at least, understood that this was not meant to denote that the mechanism was non-accidental or the

manner of death was homicide because the manner of death was classified by the Investigating Coroner as "undetermined" until after Kenneth's mother was convicted of manslaughter.

Reference: Medical Certificate of Death, PFP006382, at p. 1
Letter from Dr. Cairns to Dr. Clark, PFP006301

632. From the outset, Dr. Smith addressed the potential alternative mechanisms of Kenneth's death in conversation with the police:

> [T]here was nothing remarkable found on the body of the deceased that would indicate an obvious cause of death. Dr. Smith categorized it as a suffocation death caused by an obstruction of the airways. (Nose and mouth) He felt that a bedsheet, as described by the mother, would be porous and allow air to flow freely unlike a plastic bag or a dry cleaning garment bag. It was also noted that a seizure was unlikely because according to the mother the child was calling out up until the time it [sic] went unconscious. If the child was having a seizure it would not have been calling out. Further test would however be completed before a final conclusion could be made.

Reference: Synopsis, PFP005894, at p. 3

633. Dr. Smith considered other potential alternative mechanisms and causes of Kenneth's death (bedsheet suffocation and seizure) however he did not believe they were likely.

634. Other experts confirmed that none of the potential explanations provided by Kenneth's mother, a seizure, asthma, or SIDS could explain Kenneth's condition upon resuscitation:

(a) Dr. Huyer opined that a seizure could not explain his condition because he was apparently talking during the incident described by Kenneth's mother and because Kenneth's mother apparently denied that Kenneth was having a seizure;

Reference: Notes of Lisa Cameron of conversation with Dr. Huyer, PFP092607
Report of Dr. Huyer, PFP047840, at p. 9
Evidence of Dr. Huyer, 10/01/2008, p. 22, line 16 to p. 23, line 19

(b) Dr. Bryan, a respiratory physiologist, provided his opinion that it was unlikely that Kenneth was suffocated by his bedsheets if he was crying for his mother since it is not possible to speak if one cannot breathe;

Reference: Opinion of Dr. Bryan, PFP092919
Trial Evidence of Dr. Bryan, PFP006091, at p. 50-51

(c) Dr. Logan, a pediatric neurologist, opined that a person does not speak during a major seizure and that a minor seizure would not cause death. He further opined that if Kenneth had had a sudden death seizure he would have had cardiac signs and would have been found dead. Finally, he testified that sudden death due to epilepsy did not explain Kenneth's death;

Reference: Dr. Bill Logan Involvement with Kenneth, PFP092623
Trial Evidence of Dr. Logan, PFP063601, at pp. 19-20 and 43

(d) Dr. Shemie, Kenneth's ICU physician, testified that a child who is able to speak is able to breathe;

Reference: Trial Evidence of Dr. Shemie, PFP063336, at p. 102-3

(e) Dr. Rao, a forensic pathologist, who was consulted by the defence prior to the preliminary hearing, provided her verbal opinion to defence counsel that Kenneth's mother's explanation of events was not credible, that there was no evidence of a congenital abnormality to explain death, that there was no evidence that asthma played a role in Kenneth's death, that Kenneth did not have epilepsy and that SIDS could be completely ruled out given Kenneth's age; and

Reference: Memo to File dated September 19, 1994, PFP304369, at p. 1-3

(f) Prof. Saukko, a forensic pathologist, confirmed that individuals suffering from a seizure cannot speak during the seizure. Prof. Saukko was not asked to comment on whether he viewed Kenneth's mother's explanation for Kenneth's death as credible.

Reference: Evidence of Prof. Saukko, 13/12/2007, p. 32, lines 10 to 24

635. In view of the history provided by Kenneth's mother and the findings on post mortem examination, Dr. Smith concluded that there was no definitive evidence pointing to the precise

mechanism of death. However he also concluded that the supposed mechanism of death provided by Kenneth's mother was not a likely explanation. This explanation nonetheless pointed towards a likely asphyxial mechanism of death, the precise mechanism unclear.

636. The only other finding that might provide some evidence of mechanism was a microscopic bruise in Kenneth's neck. This was identified by Dr. Smith in his post mortem report, but not listed as an abnormal finding as it was not considered by Dr. Smith to be sufficiently significant to rely on in reaching his conclusion on cause of death.

637. That said, it is acknowledged that "child homicides are often very difficult to detect because quite frequently children don't resist and therefore don't incur noticeable defensive traumas or injuries which are the indicators of foul play." Further, the absence of soft tissue injury in Kenneth's upper body, neck and head does not mean that the child was not suffocated.

Reference: Memo to File of Meeting with Dr. Rao dated July 25, 1994, PFP304362, at p. 2
Memo to File of Meeting with Dr. Rao dated September 19, 1994, PFP304369, at p. 2

7.09(3) Evidence at Preliminary Hearing

638. Dr. Smith acknowledged the following at the preliminary hearing:

(a) That the autopsy was essentially a negative autopsy which is what would be expected with an asphyxial death (pp. 16 and 31);

(b) That the petechial hemorrhages would be found in any obstructive asphyxial event (pp. 88-9);

(c) That the autopsy findings were consistent with SIDS but that Kenneth was too old to have died from SIDS (pp. 42-3);

(d) That he did not know the mechanism of the asphyxia (pp. 32 and 89);

(e) That the microscopic neck finding did not represent a major event and could have been caused by a pre-incident accident, the incident that lead to his death or could be "easily explained" by medical intervention; that the neck hemorrhage may or may not be a pointer to the mechanism of death; that he did not rely on it to suggest that the manner of death was homicide; and that it could determine the mechanism of death (pp. 18-9, 32, 85-6);

(f) That the lack of hyoid fracture did not rule in or rule out homicide (p. 20);

(g) That while the findings on post mortem were consistent with strangulation that he did not prefer that as the mechanism of death (p. 47);

(h) That strangulation was unlikely in view of the lack of findings in the eyes (p. 32);

(i) That the findings were consistent with suffocation and that was a better explanation than strangulation (pp. 47-48);

(j) That the autopsy did not determine whether the asphyxia was accidental or non-accidental but that whatever caused it was not a particularly "physical" event (pp. 3-5);

(k) That the explanation provided by Kenneth's mother could not explain Kenneth's death because Kenneth would not be able to talk if his airway was obstructed (pp. 39-40);

(l) That he could not rule out suffocation by Kenneth's bedsheets as the mechanism of the asphyxia (pp. 40-41);

(m) That he could not rule out a seizure as the cause of Kenneth's death but that such deaths are uncommon and usually result in aspiration causing death, of which there was no evidence (pp. 43-45);

(n) That death from a seizure would still be an asphyxial death (p. 85);

(o) That Kenneth could have had an injury to his tongue caused by a seizure that could have resolved itself during his hospital admission prior to death (pp. 73-74);

(p) That Kenneth would not likely be able to speak during a seizure, (p. 46);

(q) That he could not rule out completely asthma as the mechanism of death (p. 65); and

(r) That he could not rule out that Kenneth had pneumonia prior to October 9 but he was skeptical (p. 79).

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP093531

639. When questioned in areas outside his expertise by both the Crown and the defence attorney, Dr. Smith attempted to provide the information he felt able to (See Section 4.04 above). However, he ultimately deferred to those with greater expertise in pediatric neurology and fracture interpretation.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP093531, at p. 46, 82, 99 and 104

640. The Crown did not call evidence from Dr. Logan (pediatric neurologist) at the preliminary hearing.

641. Dr. Smith's evidence at the preliminary hearing demonstrates that Dr. Smith did not view the petechiae alone as diagnostic of asphyxia of a homicidal nature but, instead, arrived at his diagnosis based on assimilating all of the information available to him including the likelihood of death

resulting from other mechanisms other than intentional ones (all of the alternatives being asphyxial in nature). Taken as a whole, Dr. Smith's evidence was reasonable and balanced and reflected his uncertainty as to the mechanism of death.

642. While Dr. Smith did give evidence based on his personal experiences as a father, this evidence was not repeated at the trial and represented one sentence in nearly a full day of evidence (See Section 4.03(4)).

7.09(4) Evidence at Trial

643. At trial, Dr. Smith testified again that he could not state the mechanism of the asphyxia but that certain natural diseases had been ruled out by the autopsy. Therefore, he concluded the mechanism of the asphyxia was external (rather than chemical) and that both accidental and non-accidental mechanisms were possible. He further testified that he did not view neck compression as a likely mechanism of the asphyxia, either by the bedsheets or otherwise. He also testified that he did not view death from seizure as a likely explanation in view of the lack of vomit and the ability to resuscitate Kenneth. Dr. Smith left open the possibility that Kenneth died by accident and that the post mortem examination could not answer that question but instead other evidence of circumstances was necessary.

Reference: Dr. Smith's Trial Evidence, PFP063601, at p. 64-69, 72-5 and 78.

644. With respect to the explanation for death provided by Kenneth's mother, Dr. Smith testified that he was unconvinced that the history could explain the death but that someone knowledgeable in air diffusion would be better placed to address that question (which Dr. Bryan did in his testimony, referenced above in paragraph 634(b)).

Reference: Dr. Smith's Trial Evidence, PFP063601, at p. 102-3

645. Similarly, Dr. Smith expressed his view that an individual could not speak while suffering from a seizure but that he would defer to a pediatric neurologist to address that question (which Dr. Logan did in his testimony, referenced above in paragraph 634(c)).

Reference: Dr. Smith's Trial Evidence, PFP063601, at p. 114

646. In addition to Drs. Bryan and Logan, the Crown also called Dr. Shemie, Kenneth's ICU physician who also testified that Kenneth's mother's explanation did not explain Kenneth's death and that his death was caused by a deprivation of oxygen to the brain.

Reference: Trial Evidence of Dr. Shemie, PFP006144, at pp. 4 and 7-10

647. The only witness called for the defence was Kenneth's mother who testified that she found Kenneth twisted in bed sheets and when she got him untangled after 20 minutes he looked like he was asleep. She denied smothering Kenneth.

Reference: Trial Evidence of Kenneth's mother, October 19, 1995, PFP063740, at pp. 75-6, 79 and 81.

648. Despite having retained two pathologists, Dr. Rao and Dr. Jaffe, the defence did not call any expert evidence on the cause or mechanism of Kenneth's death.

Reference: Trial Transcript, October 17, 1995, PFP063336, at p.93

7.09(5) Appeal

649. Kenneth's mother appealed her conviction for second degree murder to the Court of Appeal. In dismissing the Appeal the Court stated that the "only defence advanced at trial was accident". There was no extensive consideration of the medical evidence by the Court of Appeal, reflective of the fact that the medical evidence was not seriously disputed either at trial or on appeal.

Reference: Judgment of the Court of Appeal, January 22, 1998, PFP006261, at p. 3

PART 8 - TRAUMA CASES

8.01 INTRODUCTION

650. There are four cases in the population reviewed in the Chief Coroner's Review which bring into sharp focus Dr. Smith's lack of forensic expertise, the challenge and complexity of pediatric forensic pathology and the cultural factors previously identified. With the benefit of hindsight, Dr. Smith was not well situated to be involved in any of these cases but nonetheless rendered opinions that were reasonable at the time and/or were well-supported by pathological findings.

8.02 SHARON

8.02(1) Post Mortem Examination

651. Dr. Smith acknowledged to the Commission that, in retrospect, he was unqualified to conduct Sharon's post mortem examination. Specifically, he acknowledged that he was inexperienced with the interpretation of penetrating wounds, which are uncommon in pediatric cases. However, at the time, he did not realize the significance of his inexperience.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 82
Evidence of Dr. Smith, 28/01/2008, p. 79, line 19 to p. 81, line 5

652. Dr. Smith admitted that his inexperience with cases involving penetrating wounds was revealed by the errors he made in the post mortem examination and the documentation of that examination. Specifically, he acknowledged that:

(a) The description of the wounds and wound tracks in his report were not as detailed and thorough as was required in a wound case of this nature;

(b) He made insufficient tissue excisions around the wounds, preventing full analysis of the nature of the wounds;

(c) He did not ensure that sufficient photographs were taken;

(d) He failed to take swabs of the wounds for analysis of saliva.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 83

653. Dr. Milroy testified unequivocally that the Sharon case was one that ought to have been done by a trained forensic pathologist. As such, Dr. Smith's errors were likely inevitable given his lack of expertise. However, there is no evidence to suggest Dr. Smith failed to approach the examination with due diligence and in good faith.

Reference: Evidence of Dr. Milroy, 19/11/2007, at p. 89, lines 2 to 12

8.02(2) Cause of Death

654. Dr. Smith concluded that Sharon died from exsanguination from multiple stab wounds. Despite his acknowledgement that this cause of death was likely in error and that at least some, if not all, of Sharon's wounds were caused by a dog, Dr. Smith's opinion was not unreasonable at the time it was given.

Reference: Post Mortem Report of Dr. Smith, PFP011179, at p. 9

655. First, as stated above, Dr. Smith had little experience with penetrating wound interpretation. Moreover, he was equally inexperienced with dog attacks on children.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 79, line 19 to p. 8, line 5

656. Second, Dr. Smith was not presented with the possibility that Sharon was killed by a dog until weeks or months after the post mortem was completed. At the time he conducted his post mortem examination and gave his preliminary oral opinion to the police, he was not aware of the possibility that Sharon's death could have been caused by a dog.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 82-83
Evidence of Dr. Smith, 28/02/2008, p. 79, lines 7 to 15 to p. 81, lines 13 to 19

657. There is nothing in the Coroner's warrant regarding the presence of a dog at the scene or the potential of a dog attack. Nor is there any evidence that the Coroner requested that Dr. Smith consider this as a possible cause of death.

Reference: Warrant for Post Mortem Examination, PFP011695

658. The photographs taken of the scene of death that Dr. Smith examined prior to performing the autopsy did not reveal the existence of a dog. The police did discuss with Dr. Smith the possibility that Sharon had been attacked by scissors.

Reference: Notes of Cst. Goodfellow, PFP086371, at p. 8
Preliminary Hearing Evidence of Cst. Goodfellow, PFP077731, at p. 85

659. Nor did the Kingston police who were present during the autopsy advise Dr. Smith that a dog was present on the scene or that it was possible that Sharon might have been attacked by a dog.

Reference: Evidence of Insp. Begbie, 24/01/2008, p. 182, lines 13 to 20
Preliminary Hearing Evidence of Cst. Goodfellow, PFP077731, at p. 35

660. With little prior experience with dog attacks and penetrating wounds, and no information that would suggest that a dog might have attacked Sharon, it was not unreasonable for Dr. Smith to have considered the wounds to be stab wounds, likely caused by scissors.

661. Third, Dr. Smith was assisted at the autopsy by an experienced autopsy assistant, Mr. Barry Blenkinsop. According to Dr. Wood, Mr. Blenkinsop had performed thousands of autopsies during his career. He was widely considered an experienced, knowledgeable and competent autopsy assistant. Dr. Smith certainly understood that Mr. Blenkinsop had lots of experience with the interpretation of wounds.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 82
Evidence of Dr. Wood, 28/01/2008, p. 195, line 13 to p. 196, line 3
Evidence of Dr. Young, 30/11/2007, p. 179, lines 1 to 9

662. According to Dr Smith, Mr. Blenkinsop did not express any concerns about Dr. Smith's conduct of the post mortem examination or his initial conclusion in the case that Sharon had died from exsanguination from multiple stab wounds. Dr. Smith believes that if Mr. Blenkinsop had doubts about the nature of the wounds and/or did not think they were stab wounds, he would have advised Dr. Smith.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 82-83
Evidence of Dr. Smith, 28/01/2008, p. 84, lines 3 to 15

663. Fourth, and finally, Dr. Chiasson testified that the Sharon case was not straightforward – it was not an obvious dog attack case.

Reference: Evidence of Dr. Chiasson, 10/12/2007, p. 178, line 18 to p. 179, line 14

664. For these reasons, although mistaken, Dr. Smith's conclusion was not unreasonable.

8.02(3) The Dog Attack Theory of the Defence

665. It has been alleged that the possibility of a dog attack was known by the police and Dr. Smith from the very outset of the death investigation. The evidence before the Commission demonstrates this assertion to be false.

666. In fact, the possibility that Sharon was killed by a dog attack was not seriously raised until December 1997, some six months after Sharon's death. The first documentary evidence of the dog attack theory is a note by Assistant Crown Attorney as follows: "Rumble thinks the injuries are bite marks and will retain his own pathologist to look at photos".

Reference: Memorandum from Ms Ferguson to Mr. McKenna, PFP087957, at p. 1

667. Prior to December 1997, it appears that at most, after learning of the possible presence of a pit bull in the home, the police were simply attempting to rule out its involvement, something which was not considered likely by anyone.

668. Sgt. Begbie testified that the first time the police became aware that Hat Trick had been in the home was on June 16, 1997, after the autopsy was completed. At that time, one of the investigating officers, Sgt. Kennedy queried whether one of the wounds on Sharon's back might have been caused by a dog. Sgt. Goodfellow telephoned Dr. Smith to inquire of him whether the wounds on Sharon's back could be attributable to a dog. Sgt. Goodfellow's notes record the conversation as follows: "We have concerns about upper back marks. A: not domestic or wild animal in any way".

Reference: Notes of Cst. Goodfellow, PFP086371, at p. 13
Evidence of Insp. Begbie, 24/01/2008, p. 183, lines 13 to 20, p. 113, lines 2 to 12

669. Much is made of the note of D/Sgt. Bird on June 17 wherein he records Cst. Goodfellow's conversation with Dr. Smith. Specifically, D/Sgt Bird's note states, "The injuries to Sharon were definitely not caused by domestic or wild animal". It is suggested by this note that Dr. Smith unequivocally rejected the possibility that Sharon was killed by a dog at this early stage. However, D/Sgt. Bird did not speak directly with Dr. Smith and his note is inconsistent with Sgt. Goodfellow's, who did. It is clear from Sgt. Goodfellow's note that Dr. Smith's opinion was in relation to marks on Sharon's back. Moreover, there is no suggestion from the police that they were seriously considering a dog attack to be the cause of Sharon's death at that time.

Reference: Notes of Insp. Bird, PFP085377, at pp. 20-21

670. It also should be noted that when the police initially conducted a video-taped interview of Louise Reynolds, she made no mention of Hat Trick. Specifically, she did not claim that Hat Trick

must have attacked Sharon. In fact, none of the witnesses who were interviewed by the police in these early days of the investigation suggested that Hat Trick might be responsible.

Reference: Transcript of Videotaped Statement of Louise Reynolds, PFP087733
Statement of Gary, PFP087636
Statement of Blandin, PFP085565
Statement of Cope, PFP085633
Statement of Vallier, PFP086438
Statement of Chase, PFP085601
Statement of [redacted] Reynolds, PFP086158
Statement of MacLeod, PFP086009
Statement of Bergeron, PFP085541
Statement of [redacted] Reynolds, PFP086127

671. Indeed, Dr. Smith's Final Autopsy Report for the hospital records provides as a short history that "the mother initially indicated that the family dog (a pit bull) was covered in ketsup but *later* blamed Sharon's death on dog bites". This report is undated but clearly indicates that this theory of a dog attack was presented much later than the post mortem examination.

Reference: Final Autopsy Report, PFP011580 [emphasis added]

672. Finally, there is no evidence that Dr. Smith was privy to the information obtained by the police regarding the possibility of a dog attack. Indeed, Dr. Smith does not believe he was advised that Hat Trick had reportedly been acting oddly in the days following Sharon's death, that hair and blood were found in Hat Trick's collar, that Hat Trick's feces had blond hair in it, and that the police had an opinion from an animal behaviourist regarding Hat Trick. Indeed, in an affidavit sworn on January 24, 1998 by a defence private investigator in support of Louise's leave application for bail, the defence claim that the Crown disclosure suggests that the police did not make "any attempt to contact Dr. Smith to notify him of the possibility that this pit bull dog may have caused some, if not all, of the wounds to Sharon".

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 84
Affidavit of David Black, PFP082895, at p. 19

673. In any event, by the time the defence was seriously advancing the dog attack theory to explain Sharon's death, Louise had already been charged. D/Cst. Begbie testified that the charges were not laid exclusively on the basis of Dr. Smith's pathology findings. There was other circumstantial evidence that suggested Louise Reynolds was guilty of Sharon's death, including the eyewitnesses that put Louise and her daughter together around the anticipated time of death, (despite Louise's assertion to the contrary), evidence of Louise's prior behaviour (i.e. anger management problems), evidence in the CAS file about Louise's parenting challenges, as well as Louise's own inculpatory statements ("If you say you have the evidence that I did it then I believe you, I just do not know why I cannot remember").

Reference: Evidence of Insp. Begbie, 24/01/2008, p.117, line 11 to p. 118, line 13
Statement of Fannon, PFP085811
Statement of Hill, PFP085921
Statement of Bergeron, PFP085541
Statement of Gibson, PFP085855
Statement of Gibson, PFP085858
Notes of Cst. Begbie, PFP086502, pp. 47-48

674. OPP Behavioural Sciences expert Jim Van Allen had also opined in August 1997 that the circumstances of Sharon's death implicated Louise.

Reference: Report of D/Sgt. Van Allen, PFP087814, at pp. 5-6

675. Moreover, Sgt. Begbie confirmed that Dr. Smith's advice that a dog did not cause the wounds on Sharon's back did not close the door on the police's investigation of dog involvement.

Reference: Evidence of Insp. Bird, 27/01/2008, p. 210, line 10 to p. 211, line 11

8.02(4) Dr. Smith's Response to the Dog Attack Theory

676. Dr. Smith acknowledged that when the dog attack theory was seriously presented to him, he rejected it as implausible. He explained that he simply did not believe that wounds were what he understood to be classic dog wounds.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 85

677. Dr. Smith also testified that he was comforted in his conclusion by the opinions held by others with more experience than he. Specifically, he testified that he was aware of and relied on the opinion of Dr. Robert Wood, Crown odontologist, Dr. David Chiasson, CFPU, Dr. Ben Bechard, Regional Coroner and Mr. Barry Blenkinsop.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 84
Evidence of Dr. Smith, 28/01/2008, p. 84, lines 16 to 21

678. The evidence before the Commission confirms that all of Drs. Wood, Chiasson, Bechard and Mr. Barry Blenkinsop rejected the dog attack theory prior to Dr. Smith testifying at the preliminary hearing.

679. D/Cst. Begbie testified that Dr. Bechard "scoffed off" the possibility of dog involvement rather unequivocally. According to Begbie, Dr. Bechard stated "a dog didn't do this, all of these wounds..these are stab wounds".

Reference: Evidence of Insp. Begbie, 24/01/2008, p. 113, lines 15 to 20

680. Moreover, at some time after the autopsy but prior to the preliminary hearing, Dr. Smith testified that he attended a case conference at which Dr. Cairns, Dr. Wood and Dr. Chiasson were present. At that meeting, he learned that both Dr. Wood and Dr. Chiasson were of the opinion that the wounds on Sharon's body were not caused by a dog.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 84
Evidence of Dr. Smith, 28/01/2008, p. 82, lines 3 to 19

681. Specifically, with respect to Dr. Wood, Dr. Smith testified that he has a clear recollection that Dr. Wood held "no doubt" about the nature of Sharon's wounds.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 84
Evidence of Dr. Smith, 28/01/2008, p. 82, line 20 to p. 23. line 1

682. Although he does not recall the specifics of Dr. Chiasson's comments, Dr. Smith testified that he was fairly certain that Dr. Chiasson did not express any concerns about the consensus conclusion that these were not dog bites.

> **Reference:** Dr. Smith's Written Evidence, PFP303346, at p. 84
> Evidence of Dr. Smith, 28/01/2008, p. 83, lines 2 to 18

683. Dr. Smith's evidence is entirely consistent with Dr. Cairns' evidence regarding the case conference:

> I did tell you that I was at a meeting sometime after the autopsy was done, where at least a potential issue [were] these dog bites came up. Commissioner, this would have been at a forensic rounds meeting on a Wednesday afternoon in the Chief Coroner's Office. Dr. Smith attended that meeting…But Dr. Smith presented this case and presented photographs or 35 millimetre slides as they were then, and indicated to those present – and those present were Dr. Wood, Dr. Smith, Mr. Barry Blenkinsop, Dr. Chiasson, Dr. Martin Queen, who was one (1) of our other forensic pathologists, and myself….And the discussion came up that there had been some information been brought to people's attention that these may not be stab wounds, that they may be dog bites and it was discussed. And primarily the opinion of Dr. Wood was, no, these were dog bites. Barry Blenkinsop, who had been there for years and years and had seen probably more dog bites, more wolf bites, et cetera, than anyone else, was emphatic that these were – were not. Dr. Chiasson did not feel that they were dog bites and I wouldn't have had the expertise but I was going along with them. And to be fair, Dr. Martin Queen was the only one (1) who wasn't sure that these may not be dog bites.
>
> **Reference:** Evidence of Dr. Cairns, 26/11/2007, p. 220, line 19 and p. 221, lines 15 to 20 and p. 222, lines 10 to 24

684. Dr. Cairns was asked when this case conference was held and although he has no record of the precise date, testified that it was a "reasonable" period of time after the autopsy – "probably a month, two months, three months".

> **Reference:** Evidence of Dr. Cairns, 26/11/2007, p. 221, lines 3 to 14

685. In any event, Dr. Cairns testified that the opinions of these other experts would likely have bolstered Dr. Smith's own view as to the origin of Sharon's wounds. He testified that even after it became known that likely some of the wounds were attributable to a dog, OCCO did not place the blame exclusively on Dr. Smith in light of these other opinions:

> If Dr. Smith alone had been responsible for that opinion, it probably would have given me concern about his confidence. But he had in part relied on the expertise of Dr. Wood. He had also relied on the long term experience of Mr. Blenkinsop, who, while not a professional, whose opinion certainly would have been taken seriously, and in addition, Dr. Chiasson. So that is the one (1) - - one (1) of the cases where I would say there was collective responsibility, and I wouldn't put - - I would probably put Dr. Smith's involvement there as the least experience of the people I have met - - I've mentioned to you.
>
> **Reference:** Evidence of Dr. Cairns, 26/11/2007, p.241, line 22 to p. 242, line 10

686. Dr. Queen confirms that he attended a case conference at which the Sharon case was discussed around that time. Specifically, Dr. Queen testified that he attended this case conference "having just returned from Baltimore". Dr. Queen returned from Baltimore in August 1996. It is likely then this case conference was within the time frame suggested by Dr. Cairns and Dr. Smith, rather than Dr. Chiasson, who claims that he did not attend a case conference in this case until the Spring of 1999, which would have been around the time Dr. Queen resigned.

> **Reference:** Interview Summary of Dr. Martin Queen, PFP303627, at pp. 5-7
> Memorandum from Dr. Chiasson to Dr. Young, PFP129428, at p. 1

687. In any event, Dr. Queen recalls that the meeting was held in the pathology boardroom and that Drs. Chiasson, Smith, Cairns and Wood were present, as well as Mr. Blenkinsop. He recalls that photos were sent around the table and people were asked to comment.

> **Reference:** *Ibid*

688. Dr. Queen only has specific memories of the views of expressed by Dr. Wood and Mr. Blenkinsop. According to Dr. Queen, Mr. Blenkinsop was "adamant that the wounds were not dog bites". The same opinion was voiced by Dr. Wood.

> **Reference:** *Ibid*

689. Dr. Queen observed that, in retrospect, perhaps Dr. Smith "may have been influenced by Mr. Blenkinsop and Dr. Wood".

> **Reference:** *Ibid*

690. That Dr. Wood's opinion was expressed unequivocally at the case conference is consistent with the report he issued in which he states: "In summary I can say without equivocation that the markings seen on the deceased are not dog bite marks".

Reference: Report of Dr. Wood, PFP011543, at p. 2

691. Dr. Smith's rejection of the dog bite theory was reasonable to the extent that it was not an isolated opinion. Other experienced experts held the same view and communicated that view to officials at OCCO. The error, such as it was, was apparently a "collective" one, perhaps suggesting that it was not unreasonable to have concluded that the wounds were stab wounds.

Reference: Evidence of Dr. Cairns, 26/11/2007, p. 242, lines 5-10

8.02(5) Evidence at Preliminary Hearing

692. Dr. Smith testified at the preliminary hearing into the charges against Louise Reynolds in April 1998. As state above, prior to that time, the defence had raised the possibility of Sharon's death being caused by a dog attack.

693. In response to this theory, the Crown formally retained Dr. Wood to review the case and opine on the origin of Sharon's wounds. Dr. Wood was not simply an odontologist; he was also the Coroner's wound-weapon expert.

Reference: Evidence of Dr. Chiasson, 07/12/2007, p. 73, lines 10 to 20
Memo from Jennifer Ferguson to Jack McKenna, PFP087957, at pp. 2 to 3

694. Dr. Wood testified that when he was asked by the Crown to review the case, he understood he was to respond to a "new theory" put forward by the defence that a dog had been involved in the death of Sharon.

Reference: Evidence of Dr. Wood, 23/01/2008, at p. 188, line 16-22

695. Notes by the Crown Attorney demonstrate that it was Dr. Wood, not Dr. Smith, upon whom the Crown intended to rely to defeat the dog attack theory of the defense. Specifically, Assistant Crown Attorney, Jennifer Ferguson's notes' state:

> Dr. Bechard called this morning to tell us he had spoken to Rumble yesterday. He told me about Rumble's theory re the dog and advised that Dr. Woods, a forensic dentist, could nip that theory in the bud if we wanted a consultation with him. He would examine the photos, indicate which injuries were likely to be bite marks and computerize the images.
>
> **Reference:** Memo from Ferguson to McKenna, PFP087957, at p. 3

696. After Dr. Wood issued his written consultation report in February 1998, Ms Ferguson further observed as follows: "Crown's case is stronger now that the dog bites have been ruled out and head lice has been found on deceased's scalp".

> **Reference:** Letter from Jennifer Ferguson to Susan Reid, PFP088921, at p. 3

697. Finally, on June 19, 1998, Ms Ferguson again confirmed that the Crown was relying on Dr. Wood to dispel the dog attack theory which had been carefully articulated in two affidavits filed by the defence investigator in support of the application for leave for a bail review and Dr. Dorion's expert report:

> Dr. Woods is being consulted presently. As you can appreciate, however, it will be somewhat difficult for Dr. Woods to meaningfully critique Dr. Dorian's findings when he sets out no basis for them in his preliminary report … I don't expect Dr. Woods will testify that dogs don't ever bite the head and neck area of children (see paragraph 6). Rather, the limbs are usually the first targets and there are no injuries in this case to the hands or feet in Sharon's case. If there were injuries to the hands and feet, this would have raised a red flag for the examiner.
>
> **Reference:** Letter from Jennifer Ferguson to Susan Reid, PFP088941, at pp. 1-2

698. In result, Dr. Smith's evidence that he was surprised to learn immediately prior to testifying at the preliminary hearing, that the Crown did not intend to call Dr. Wood as a witness at the preliminary hearing, is understandable. Dr. Smith testified that he understood the decision was made because the Crown did not want to lend credence to the dog attack theory. The Commission has

evidence to suggest another explanation – that is, that Dr. Wood had written a "go away" letter to the Crown, advising that he would charge $1600/day if called to testify.

Reference: Dr. Smith's Written Evidence, PFP303346, at p84
Evidence of Dr. Wood, 23/01/2008, p. 200, lines 3 to 15
Letter from Dr. Wood to Cst. Barrett, PFP081007

699. Whatever the explanation, Dr. Smith testified that in retrospect, he believes he may have been even more definitive about whether or not there were dog wounds on Sharon's body because he felt that he had to speak on behalf of the Crown and dismiss the dog attack theory. He acknowledged that this was inappropriate but was not aware that he was doing it at the time.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 84
Evidence of Dr. Smith, 28/01/2008, p. 85, line 1 to p. 86, line 3

700. Dr Smith candidly admitted that the opinions he expressed at the preliminary hearing were over-stated, particularly in light of his own inexperience with dog attacks. However, he also gave evidence that he believed that which he testified – that is, that Sharon's wounds were inconsistent with his understanding as to the classic appearance of dog wounds. In his experience, admittedly limited, he did not think the wounds were dog wounds. There is absolutely no evidence that Dr. Smith was attempting to mislead the Court or that he did not hold the opinions expressed in good faith.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 85

701. Moreover, Dr. Smith's state of mind is important when considering the quality of his preliminary hearing evidence. He had attended a case conference at which his colleagues had almost all expressed strong opinions that Sharon's wounds could not have been caused by a dog. He then arrives at the preliminary hearing expecting to testify in a supporting role to the Crown's odontology expert, Dr. Wood. Instead, he is advised that he is the lone expert witness for the Crown, expected

to dispel the dog attack theory raised by the defence. His, at times, aggressive response to cross examination on the possibility of a dog attack should be measured in this context.

702. This may also explain Dr. Smith's reluctance to acknowledge that adult pathologists had more experience than he did in respect of the interpretation of penetrating wounds. Although he did state what he believed – that is, that patterns of wounds differ in children - he also acknowledged that wounds by a knife or scissors were more common in the adult field than in the pediatric field. In any event, what is clear is that Dr. Smith did not know just how little he knew or understood. His evidence must be considered from this perspective.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP076807, at pp. 55-59
Dr. Smith's Written Evidence, PFP303346, at p. 82
Evidence of Dr. Smith, 28/01/2008, at p. 88, line 16 to p. 81, line 5

8.02(6) Dr. Smith's Role in Retainer of Dr. Wood

703. Dr. Smith testified that he had sought the assistance of an odontologist in the case. It is suggested that he misled the Court into thinking he was responsible for retaining Dr. Wood and that Dr. Wood had examined Sharon's body in the days following the post mortem examination. Dr. Wood claims to have been first involved sometime in the winter of 1997/98.

Reference: Evidence of Dr. Wood, 23/01/2008, p. 67, lines 2 to 9, p. 73, lines 12 to 21

704. There are several noteworthy features of this allegation. First, Dr. Smith testified that he and Barry Blenkinsop had discussed the possibility of Dr. Wood examining the wounds to rule out a bite, dog or human, and offer his special expertise on wound interpretation. There is no doubt that this was Dr. Wood's expertise and that he was frequently in the Coroner's Building for consultations.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 83
Evidence of Dr. Chiasson, 07/12/2007, p. 73, lines 10 to 20
Evidence of Dr. Wood, 23/01/2008, p. 191. lines 16 to 24

705. Second, Dr. Smith acknowledged that he did not speak directly with Dr. Wood at the time. He understood that Mr. Blenkinsop would arrange for the consultation. When he left the Coroner's Building, he assumed Dr. Wood would come and examine the body.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP076807, pp. 82-84
Dr. Smith's Written Evidence, PFP303346, at p. 83

706. It appears that the next significant meeting was a case conference before the preliminary hearing, at which Dr. Wood was present. As such, Dr. Smith had every reason to believe that Dr. Wood had been consulted through Mr. Blenkinsop's invitation.

Reference: See paras. 680 to 689, above

707. Not insignificantly, although the documentary record suggests that Dr. Wood was retained at the suggestion of the Kingston Crown Attorney's office after consultation with Dr. Bechard, the Regional Supervising Coroner, and facilitated by Sgt. Bird, Dr. Wood himself testified that he understood he was referred on the case by Mr. Blenkinsop and was contacted by Cst. Barrett. Dr. Wood has no memory of Dr. Bechard's involvement.

Reference: Evidence of Dr. Wood, 23/01/2008, p. 73, lines 12 to 21

708. Dr. Wood cannot recall attending a case conference on Sharon prior to the preliminary hearing, at which Drs. Smith, Cairns and Queen all recall him being. Moreover, Dr. Wood testified that he had "no recollection" of the precise dates of when Cst. Barrett contacted him.

Reference: Evidence of Dr. Wood, 23/01/2008, p. 191, lines 4 to 15
Evidence of Dr. Wood, 23/01/2008, p. 67, lines 2 to 9

709. It is respectfully submitted that it is quite possible that Dr. Smith did in fact discuss Dr. Wood's involvement with Mr. Blenkinsop. It is also possible that Mr. Blenkinsop facilitated the police delivery of photographs for Dr. Wood's review. It may very well be that Mr. Blenkinsop did

not think a direct examination of Sharon's body by Dr. Wood was necessary because he himself had no doubt about the nature of the wounds.

710. Dr. Smith was not cross examined on this issue. The Commission did not hear evidence from Barry Blenkinsop (deceased), Dr. Bechard, Cst. Barrett, Jennifer Ferguson or Jack McKenna. As such, the suggestion that Dr. Smith misled the Court about Dr. Wood's involvement rests on the shaky ground of an *ex post facto* interpretation of a documentary record and the *viva voce* evidence of Dr. Wood who would have an interest in down-playing his involvement in this case for obvious reasons.

8.02(7) Exhumation, Second Post Mortem and Supplementary Report

711. The Commission heard evidence as to the genesis of the exhumation and second post mortem examination on Sharon's body. What is abundantly clear is that Dr. Smith was not involved in the decision to review the case. However, there is no evidence that he ever objected to the decision made by the OCCO to do so.

712. In fact, Dr. Smith testified that he attended the second post mortem examination because Dr. Chiasson asked him to attend. By that time, there was some concern that Dr. Smith may have erred in his initial opinion. At that time, Dr. Smith felt that he could add nothing further to the investigation.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 85
Evidence of Dr. Chiasson, 10/12/2007, p. 67, lines 5 to 12

713. This may also explain why Dr. Smith testified that he failed to appreciate that he would be expected to complete a second post mortem report. He thought he was merely an observer to the examination, almost as a courtesy. It is for this reason that the report was not forthcoming after the second post mortem examination.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 85

714. In fairness to Dr. Smith, it is somewhat odd that he was expected to prepare a second post mortem report. If there was any doubt as to his initial conclusion (which by that time there was), it was entirely appropriate for OCCO to ask another pathologist (Dr. Chiasson) to conduct a second post mortem examination. Thereafter, once the second post mortem examination was complete and Dr. Smith was shown to have been, at least partly, in error, query why OCCO, the police or the Crown would want any continued involvement from Dr. Smith.

715. In any event, any delay in the delivery of Dr. Smith's second post mortem report cannot be said to have had any influence on the Crown. By early fall 1999, the Crown had in hand a second post mortem report from Dr. Chiasson, incorporating by reference the new conclusions from Dr. Wood. The Crown did not need Dr. Smith's opinion to make any decisions as to how to proceed.

Reference: Report of Second Post Mortem Examination, PFP011496

716. In fact, Dr Smith testified that he had little or no involvement with the Crown or the police after the second post mortem examination. Specifically, he was not consulted regarding the decision to continue to prosecute Louise Reynolds, apparently taken immediately after the second post mortem examination. He was also not involved in any of the consultations with other medical experts.

Reference: Dr. Smith's Written Evidence, PFP303346, pp. 85-86

717. In January 2001, when Dr. Smith learned that the Crown's case rested entirely on his opinion that some of the wounds were not caused by a dog, Dr. Smith advised the Crown that he was not comfortable being the only person opining on this issue because he did not have the experience to stand behind his opinion. He particularly felt that without Dr. Wood's support, he could not stand

alone against the defence experts. This is entirely consistent with his evidence that he relied on others from the outset to bolster his opinion. When they recanted their opinions, Dr. Smith was no longer willing to hold on to his.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 86
Evidence of Dr. Smith, 28/01/2008, p. 86, line 6 to p. 87, line 21

8.02(8) Withdrawal of Charges against Louise Reynolds

718. Dr. Smith maintains that the Crown misrepresented the state of the medical evidence in the statement to the Court explaining the decision to withdraw charges against Louise Reynolds. Specifically, Dr. Smith gave evidence that the statement was erroneous in several respects:

(a) It suggests that Dr. Smith knew of the possibility of a dog attack causing death at the time of his initial post mortem examination. He did not;

(b) It suggests that the Police were aware of the theory of the dog attack causing death prior to charges being laid against Louise Reynolds and that based on Dr. Smith's unequivocal opinion that the wounds were stab wounds and not dog bites, they proceeded to charge Louise Reynolds. As stated above, the police were not aware of the defence theory until several months after the post mortem examination and Dr. Smith did not render an unequivocal opinion until that time;

(c) It suggests that Dr. Smith had disclosure of the reports of Drs. Ferris and Dorion prior to the preliminary hearing. He did not; and

(d) It fails to point out that there were other experts who agreed with Dr. Smith: Dr. Wood, Dr. Reid, Dt. Van Allen, etc. These experts all supported the Crown theory that Louise had killed her daughter.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 86-87

8.03 VALIN

8.03(1) Dr. Smith's Limited Involvement in the Case

719. It is widely asserted that Dr. Smith was solely responsible for Mr. Mullins-Johnson's conviction of murder of Valin. With respect, this assertion is completely unfounded.

720. Dr. Smith actually had only limited involvement with this case.

721. He did not perform the post mortem examination under warrant. Dr. Bhubendra Rasaiah performed the examination in Thunder Bay on June 27, 1993 and issued his post mortem report on July 13, 1993.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 99-100
Evidence of Dr. Smith, 28/01/2008, p. 89, lines 1 to 3
Report of Post Mortem Examination, PFP003199

722. Indeed, contrary to an assertion by counsel for Mr. Mullins-Johnson that Dr. Rasaiah contacted Dr. Smith on the day of the post mortem, Dr. Rasaiah had absolutely no contact with Dr. Smith in respect of Dr. Rasaiah's post mortem examination or report.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 99

723. Mr. Mullins-Johnson was charged with first-degree murder on June 27, 1993 based on the opinion of Dr. Rasaiah, who had also consulted with Dr. Patricia Zehr, gynaecologist at Sault St. Marie General Hospital and Dr. Marcellina Mian of the SCAN program at HSC. There is no basis for the assertion that Mr. Mullins-Johnson was charged because of Dr. Smith's opinion – he had not offered any opinions on the case by that time.

Reference: Consultation Record of Dr. Zehr, PFP004872
Handwritten Note, PFP154437

724. Dr. Smith was consulted by Dr. Mian in late July 1993, after which they co-authored an opinion based upon a review of photographs taken at the post mortem examination. Again, Dr. Smith

had no contact with Dr. Rasaiah, the police or the Crown prosecuting Mr. Mullins-Johnson at this time. After discussions with Dr. Mian, Dr. Smith signed the report that had been drafted by Dr. Mian.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 99
Letter of Mian to Smith, PFP154435, at p. 1
Letter of Mian to Rasaiah, PFP154424, at p. 1
Report on Johnson, Valin, PFP003220

725. Dr. Smith did not testify at the preliminary hearing. As such, it cannot be said that Mr. Mullins-Johnson was committed for trial based on any opinion offered by Dr. Smith.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 100
Evidence of Dr. Smith, 28/01/2008, p. 89, lines 8 to 11

726. Dr. Smith's first direct contact with the prosecution occurred in June 1994, several months prior to the trial. At that time, he was contacted by the Crown who was prosecuting Mr. Mullins-Johnson and asked for an opinion as to whether or not Valin could have died from natural causes. He gave that opinion orally to the Crown and then testified at Mr. Mullins-Johnson's trial in September 1994.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 100

727. Dr. Smith was one of four pathologists who testified at Mr. Mullins-Johnson's trial. Two pathologists, Dr. Smith and Dr. Rasaiah, testified for the Crown and two pathologists, Dr. Ferris and Dr. Jaffe, testified for the defence. As detailed below, it is an inaccurate and erroneous characterization of the medical evidence given at trial to suggest that Mr. Mullins-Johnson was convicted solely on the basis of Dr. Smith's opinions. In fact, the opinions he gave were echoed in large part by the other pathologists who testified.

728. Dr. Smith has apologized for the errors he made in this case. However, he is not the only pathologist who made errors in the case and he should not be held solely responsible for the erroneous medical evidence at trial.

8.03(2) Cause of Death

729. Dr. Smith opined that Valin died from asphyxia. Although he was unable to determine the mechanism of asphyxia, he acknowledged that manual strangulation was a possibility. He testified that Valin did not die a natural death.

Reference: Dr. Smith's Trial Evidence, PFP037014, at p. 71, lines 27 to 35 and p. 73, lines 12 to 15, p. 74, lines 6-11, lines 20 to 30

730. All three of the other pathologists who testified at Mr. Mullins-Johnson's trial gave similar evidence regarding cause of death.

731. Dr. Rasaiah testified that the cause of death was cardio-respiratory arrest due to asphyxia. He concluded that there was mechanical obstruction either to the nose and mouth, neck or upper chest. Moreover, Dr. Rasaiah categorized this as an unnatural cause of death and testified that he found no evidence of a natural cause.

Reference: Trial Evidence of Dr. Rasaiah, PFP036812, at p. 70, lines 30 to 35 and p. 52, lines 21 to 31

732. Dr. Ferris opined that although death was undetermined, the external and internal bruising to the neck, sustained at or around the time of death, taken in conjunction with facial hemorrhages "can be reasonably interpreted as evidence of manual strangulation". He also found no evidence of natural disease.

Reference: Trial Evidence of Dr. Ferris, PFP037225, at p. 46-47, p. 53-55 and p. 21

733. Finally, Dr. Jaffe opined that although death was undetermined, he could not exclude manual strangulation as a possibility.

Reference: Trial Evidence of Dr. Jaffe, PFP037014, pp. 168-169, lines 200 to 201

734. It appears that one of the confounding factors in this case was the finding of petechiae on the face, neck and upper chest. Dr. Ferris in his consultation report, dated June 31, 1994, described the findings as follows:

> However, I believe that there is evidence of one area of bruising on the under-surface of the left side of the scalp and that there is a distinct bruise on the left side of the neck just below the jaw margin. These are within areas of petechial haemorrhage but can be identified as distinct from the petechiae related lesions.
>
> There are pathologically significant haenorrhages on the face. Theses are tiny diffuse and uniformly distributed on the face, and eyelids and are of a type characteristically associated with asphyxial deaths caused by compression of the neck structures…The external bruising on the left side of the neck is consistent with the application of blunt force to the neck. There is fresh bruising in the deep structures of the … neck structures. These injuries were sustained at or around the time of death and when taken in conjunction with the facial petechial haemorrhages can be reasonably interpreted as evidence of manual strangulation.

Reference: Report of Dr. Ferris, PFP036150, at pp. 4 and 5

735. The consultation report by Drs. Smith and Mian echoes this analysis:

> The child's face and upper chest show evidence of petechiae and small bruises. If these are confirmed by histologic examination, their pattern is consistent with an asphyxial mode of death, resulting from chest or abdominal compression.

Reference: Report of Drs. Smith and Mian, PFP003220, at p. 1

736. Over a decade later, all of the reviewers concluded that all of the facial petechiae and the neck hemorrhage can be accounted for by the presence of post mortem hypostasis. Dr. Pollanen concurs, noting that this post mortem hypostasis resulted from prone positioning of the body and the development of intense livor mortis (gravitational pooling of the blood after death). Dr. Pollanen

notes that livor mortis is "most problematic in the ventral neck and scalp, where it simulates the hemorrhagic lesions of strangulation and sub scapular bruising, respectively.

Reference: Medico-Legal Report of Dr. Milroy, PFP004096, at p. 18
Medico-Legal Report of Dr. Butt, PFP004065, at pp. 6-8
Medico-Legal Report of Dr. Crane, PFP004089, at pp. 5-6
Consultation Report of Dr. Pollanen, PFP003797, at pp. 14-15

737. It appears that at least Drs. Rasaiah, Smith and Ferris confused the post mortem phenomenon of hypostasis with bruising. However, this does not imply that these pathologists were negligent. Dr. Pollanen notes that this phenomenon "is commonly observed in forensic autopsies, but can be quite alarming to those who have not become acquainted with it". At the Commission, Dr. Smith testified that he had never seen such a child with as much post mortem lividity.

Reference: Consultation Report of Dr. Pollanen, PFP003797, at pp. 14 - 15
Dr. Smith's Written Evidence, PFP303346, at p. 99

738. Moreover, as stated above in Section 3.03, hypostatic hemorrhages can "mimic bruising" and an autopsy diagnosis can be difficult when intense lividity develops in gravitationally-dependent parts of the body. Although erroneous, the misinterpretation by Drs. Rasaiah, Ferris and Smith cannot be considered unreasonable in these circumstances.

8.03(3) Sexual Assault

739. Dr. Smith rendered an opinion that Valin had been sexually assaulted prior to her death on the basis of various ano-genital findings. Most of these findings were seen by the other pathologists who testified at the trial. With the benefit of knowledge today, we know that the findings relied on to make this diagnosis were likely post mortem in nature and forensically insignificant. However, the pathologists cannot be faulted for not knowing information that had not yet been widely published in the profession at the time.

740. All four pathologists opined that Valin's anus was abnormal, possibly demonstrating anal penetration:

> [T]he gaping [in the anus] is perhaps a little more than one would expect simply by post mortem relaxation.
>
> **Reference:** Trial Evidence of Dr. Jaffe, PFP037014, at p. 176

> I then examined the anal opening and…although there may be some dilation of the anal muscles post mortem, this was excessive dilation.
>
> **Reference:** Trial Evidence of Dr. Rasaiah, PFP036812, at p. 72

> The interpretation of the changes in the vagina and rectum are difficult. Dilatation of the vaginal and anal orifices, at postmortem must be done with extreme caution since the sphincter muscles around these openings often dilate after death. Nevertheless, there does appear to be evidence to suggest repeated penetration of the anus and probably the vagina before death.
>
> **Reference:** Consultation Report of Dr. Ferris, PFP003223, at p.5

> The anus is gaping with a large opening. The size in and of itself is difficult to judge in a post mortem examination. The limited number of views and the low magnification do not allow any definitive findings.
>
> **Reference:** Consultation Report of Dr. Mian and Dr. Smith, PFP003220, at p. 1

741. Moreover, three of the pathologists opined that there were abnormal findings both inside and at the opening of the anus, described variously as "inflammation", "ulceration", "laceration", "tears and splits", "fissures" and "disintegration" and were given varying forensic significance.

> [opening of anus]…fibrosis, vascular dilatation and mild chronic *inflammation*…*necrosis* of the epithelium with foreign material … extending from the opening to the underlying tissue that shows marked fibrosis, vascular *dilatation* and hemorrhages in the submucosa, muscle coat, together with *destruction* of large areas in the muscle coat and replacement by collagenous fibrous tissue….[inside anus]…extensive hemorrhage, collagenous fibrosis and moderately severe chronic inflammation…large areas of *ulceration* of mucosa with fibrosis of the submucosa, vascular dilatation and haemorrhage…destruction of the muscularis mucosa and areas of the muscle coat.
>
> **Reference:** Dr. Rasaiah's Post Mortem Report, PFP003199, at p. 7

> [opening of anus]…There is an apparent full thickness *laceration* of the mucosa with hemorrhage and some associated acute and subacute *inflammation.* The chronic inflammatory changes and scarring are difficult to interpret. The dilated blood vessels are not abnormal. I believe this represents an injury sustained some hours before death and probably represents evidence of repeated anal penetration over a period of at least several weeks. [inside of anus] There appears to be an area of chronic ulceration…

Reference: Dr. Ferris' Consultation Report, PFP003223, at p. 3

I've said there appears to be an area of *chronic ulceration* which would be consistent with the observations that I have already made about the other sections from the anus. It would be consistent with something, an injury or some infection, or something happening days or perhaps weeks prior to death. But this is not an acute episode occurring at the time of death…I saw no acute fissure. There were some *tears and splits* in the section, in the lining but none of them were associated with what seemed to me to be an injury prior to death…

Q. And then you go on, this will be almost the last sentence on the page, sir, "…I believe that the rectal *laceration* seen on microscope examination can be interpreted as evidence of anal penetration several hours before death"….Same question, what's several hours?

A. Well that relates to that 8-18 hours time frame. So we're not talking about a death related episode, but we are talking about evidence of an injury sustained some time prior to death.

Reference: Trial Evidence of Dr. Ferris, PFP037225, at pp. 27, 55

Now looking at it down the microscope, I am convinced that there are fresh *bruises* in that region, and I'm convinced that there is at least microscopically one *laceration* of the cells called epithelium which lines the surface of the body in that area, the rectum-anal region, skin region down into that. So, we have evidence of a fresh laceration and evidence of at least recent, if not fresh, bleeding or bruising into that area.

Reference: Dr. Smith's Trial Evidence, PFP037014, at p. 83

Doctor Rasaiah sent me some sections of the anal area and further up the rectal area. I see some damage which I regard as old damage. I see no recent injury…the lining of the *rectum had disintegrated,* there was fecal material where it shouldn't be, underneath…in the wall of the rectum. There was no inflammatory reaction to it. And Doctor Smith, if I understood him correctly interpreted this as showing that this injury occurred at the time of death, or very shortly before that. The other interpretation is that it occurred after death and that's why there's no inflammatory reaction.

Reference: Trial Evidence of Dr. Jaffe, PFP037014, at p. 176-177

742. Again, more than a decade later, Dr. Pollanen and the reviewers all concluded these ano-genital findings were normal post mortem changes of no forensic significance:

There is no histopathologic evidence of injury to the anus, anorectal junction, or vagina in the microscopic slides available for my examination. The observations of "ulceration", "laceration" ,and hemorrhage" made by other pathologists are, in my view, attributable to autolysis, or artefacts related to dissection or tissue preparation for microscopy. Similarly, the observations of "fibrosis", "capillary proliferation", and "chronic inflammation" are normal histology or minimal deviation from normal histology that have no forensic importance.

Reference: Dr. Pollanen's Consultation Report, PFP003797, at p. 7

See also: Medico-Legal Report of Dr. Milroy, PFP004096, at p. 19
Medico-Legal Report of Dr. Butt, PFP004065, at p. 16-19
Medico-Legal Report of Dr. Crane, PFP004089, at p. 7

743. However, Dr. Pollanen acknowledged that the question of whether there is evidence of acute penetrating anal trauma is amongst the most difficult and controversial in the field of forensic pathology. Exacerbating the challenge faced by the original pathologists involved in the Valin case was the fact that the "single best peer-reviewed study that provides important guidance on interpreting post mortem anal appearances in children" was published in 1996, some two years after Mr. Mullins-Johnson's trial.

Reference: Dr. Pollanen's Consultation Report, PFP003797, at p. 5

744. The significance of this article cannot be under-emphasized. The authors, McCann et al, noting the concern over post mortem perianal findings found at autopsy, concluded that various findings associated with ongoing sexual abuse in a living child, such as loss of normal skin folds, thickening of perianal tissues, fissures, hematomas, scars and anal dilatation, were <u>not</u> indicative of sexual abuse when discovered during an autopsy. However, they noted that the relaxation of the anal sphincter muscles produced a variety of findings that could mimic abnormal findings, misleading the pathologist to conclude that there had been sexual abuse peri-mortem:

> Anal dilatation was a common post mortem finding in these dead children. The anal sphincter muscle laxity, which produced the smooth perianal skin folds, was also responsible for a shallow anal canal. This led to the exposure of the pectinate line and the mucosa of the anal canal. At times, the irregularity of the pectinate line created an appearance similar to perianal fissures. Other common findings including fecal soiling, venous congestion, and increased pigmentation of the perianal tissues…Although there are limitations of this study due to its methodology, it is suggested that anal dilatation alone cannot be used as a marker for prior sexual abuse. In addition, exposure of the pectinate line should not be confused with tears or fissures of the anal verge.

Reference: Post Mortem Perianal Findings in Children, PFP003797, at p. 31

745. It appears that the pathologists originally involved in the Valin case may well have made the precise interpretive error addressed by the authors of the McCann study. As such, although they

erred, their conclusions cannot be considered unreasonable in light of the limitations of knowledge at the time of their involvement.

8.03(4) Care and Control Over Evidence

746. On or about February 27, 2003, AIDWYC requested of the Ministry of the Attorney General that the tissues and other evidentiary specimens be located and delivered to counsel to enable a review of the case. That material was not located until some time in between November 2004 and May 2005.

Reference: Letter from James Lockyer to Sean Porter, PFP059544
Case Contact Log, PFP003662
Case Contact Log, PFP003661

747. There are some who would attribute this delay entirely to Dr. Smith simply because the materials were ultimately located in his office and due to his own acknowledgement that he failed to pay sufficient attention to requests that he assist in their location.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 101

748. However, this is an oversimplification of a much wider systemic problem. It is clear that had the Crown had a system of categorizing and filing evidentiary material used at a trial, to enable subsequent appeals and reviews, there would have been no reason to rely upon the individual pathologist to maintain custody of such significant materials.

749. In fact, it is obvious from the evidence at the Commission that no such system was in place. In fact, not one person at the Ministry of the Attorney General had any idea where to locate these materials when the request from AIDWYC was first received.

Reference: See Section 4.02(1)

750. Secondly, the evidence demonstrates that HSC had no written policy for the storage of autopsy specimens until 2005.

Reference: Evidence of Dr. Taylor, 18/12/2007, p. 170, line 5 to p. 173, line 3

751. Nor is there any evidence before the Commission that OCCO published any policies or procedures for pathologists to store evidence in their custody.

752. Dr. Smith testified that when he was first contacted in June 2003 to determine whether he had the autopsy material, Dr. Smith had no memory of his involvement in the case. He attributes the memory loss to the fact that in 1993-94, he never saw Valin's body, had not authored a post mortem report, had not been consulted by the police and had not testified at the preliminary hearing. Apart from a relatively brief conversation with Dr. Mian in July 1993, Dr. Smith's involvement in this case was the time he spent reviewing the histology in the summer of 1994 and his one day of testimony.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 101

753. Thus, when he was asked whether he had the materials from the Valin case, he sincerely believed he did not have any of the materials.

Reference: *Ibid*

754. However, Dr. Smith candidly acknowledged that had he accessioned the Valin case in 1994 when he was consulted, and had he given the materials to the administrative staff for safe storage, the materials would have been more easily located ten years later. He also acknowledged that his office was disorganized and on this occasion, and others, such disorganization and untidiness hindered OCCO from locating the materials on a timelier basis. Finally, Dr. Smith acknowledged that he ought to have been more helpful in attempting to locate the materials.

Reference: *Ibid*

8.04 PAOLO

8.04(1) Cause of Death

755. Dr. Smith opined that Paolo's cause of death was undetermined. However, he stated that the death could not be classified as SIDS, nor was there evidence to suggest it was a natural death.

> **Reference:** Report of Post Mortem Examination, PFP002652, at p. 5

756. Dr. Pollanen concurred with this cause of death. In his consultation report, he described his conclusion as follows:

> *On the available evidence the cause of death should be recorded as unascertained*, since there is no reviewable evidence of an acutely fatal injury or condition. In a way, this is a wholly unsatisfactory cause-of-death-statement since the term unascertained is equally applicable to the unexplained death of an infant without multiple healed fractures. However, modern forensic pathology has not developed cause-of-death - nomenclature that is sufficiently precise to differentiate between different types of `unascertained deaths'. In the case of [Paolo], death occurred after a life of chronic physical child abuse, but our medical knowledge of the lethal event is elusive. *However, this death cannot be regarded as a natural death or a case of sudden infant death syndrome (SIDS)*.
>
> **Reference:** Consultation Report of Dr. Pollanen, PFP002642, at p. 3

757. Dr. Crane also opined that the death was appropriately given as "undetermined". Moreover, he too noted that Paolo clearly suffered from chronic abuse:

> There certainly was evidence that he – this infant had suffered a head injury in the past; there's no question of that. And that combined – combined with other injuries that were found, are in my view, indicative of – of abuse in the past.
>
> **Reference:** Evidence of Dr. Crane, 21/11/2007, p. 59, lines 4 to 7, p. 64, lines 4 to 9

8.04(2) Alleged Misinterpretation of Non-Specific or Insignificant Findings

758. It is alleged that Dr. Smith erroneously proffered two speculative causes of death - head injury and asphyxia - based upon insignificant or non-specific findings.

759. It is important to note that Dr. Smith made it absolutely clear in his testimony that he did not know Paolo's cause of death:

> Q. Dr. Smith, are you able to tell the jury with any certainty what the cause of death was for this child?
>
> A. No. No.
>
> **Reference:** Dr. Smith's Trial Evidence, PFP017346, at p. 239

760. Notwithstanding his conclusion that Paolo's cause of death was undetermined, Dr. Smith was invited at trial by the Crown to speculate on the possible explanations for Paolo's death based on the pathology findings.

> **Reference:** Dr. Smith's Trial Evidence, PFP017346, at p. 158, lines 22 to 28

761. However, Dr. Smith did not express that either scenario – asphyxia or head injury – was certain. In each case, he provided the Court evidence that would both support and undermine these possible causes of death.

762. With respect to the possibility of head injury, Dr. Smith stated that he was relying on the brain weight recorded by Dr. Chan to suggest brain edema and acknowledged that the recording may not be accurate. Moreover, he described all of the findings that he would have expected to see if brain edema was present and acknowledged that Dr. Chan did not find any of these. Dr. Smith candidly acknowledged that if in fact there is no brain edema, then there was no evidence that Paolo died of head injury.

> **Reference:** Dr. Smith's Trial Evidence, PFP017346, at p. 140, lines 24 to 29, p. 146, lines 10 to 17, p. 202, lines 9 to 21, p. 211, lines 4 to 12, lines 23 to 31, p. 212, lines 18 to 31, p. 214, lines 14 to 15, p. 215, lines 5 to 21, p. 217, lines 15 to 31

763. Dr. Smith's evidence in this respect was accurately understood and relied upon the Defence counsel at the trial in submissions to the Jury:

> Dr. Smith has testified that he had limited means to make that determination and that he has to rely very heavily on what the original pathologist, Dr. Chan, had done…Notwithstanding all of those errors [in Dr. Chan's post mortem examination], Dr. Smith candidly said to you, I have to rely on Dr. Chan's measurement and recording of the [brain] weight at 940 grams to suspect edema. So he has acknowledged that Dr. Chan has made all of these other errors and says to you, I have to rely on the

> brain weight to come to any conclusion about the cause of death…If you had a swollen brain and if it was up to 940 grams, what else would you see to support the accuracy of that? And Dr. Smith indicated to me that Dr. Chan in examining the head should have seen some or all of the following which would support the fact that the brain was swollen or heavy: stretched and tense dura…the brain would have bulged through the first incision into the dura…the gyri should be pale and flattened…the cut surfact of the brain should have been pale and the ventricles, especially in children may be reduced to slits by the swelling of the adjacent white matter…There should have been evidence of meningeal bleeding…and most importantly, there should have been evidence of subdural or subarachnoid hemorrhage. Dr. Chan testified that he examined carefully for all of these and found none. And he said to you in evidence, I as focusing on finding brain hemorrhage. So I respectfully submit to you there is nothing to bolster the theory of brain edema except the purported weight measured by Dr. Chan. And I also submit to you that Dr. Smith ultimately agreed that looking at all of these factors the brain weight might be incorrect. And if in fact there is no brain edema then there is no evidence that head injury caused the death of Paolo.
>
> **Reference:** Defence Closing Address to the Jury, PFP018078, at p. 272-276

764. Dr. Smith also testified that if Paolo had in fact died from asphyxia caused by neck compression, he would have expected to see, but did not see, petechial hemorrhage in the conjunctivae and the face. Moreover, he acknowledged that the hemorrhage found in the strap muscle beside the thymus could be an artefact.

> **Reference:** Dr. Smith's Trial Evidence, PFP017346, at p. 260, lines 9 to 24 and p. 229, line 28 to p. 321, line 2

765. Again, the defence appear to have fully understood the limits of Dr. Smith's testimony and described his evidence to the Jury as follows:

> Component number two, asphyxiation, and we concentrated here with respect to asphyxiation from neck or chest compression because of the haemorrhaging that Dr. Smith was suspicious of in the strap muscle beside the thymus. Dr. Smith was concerned about that area and indicated that if there was, in fact, haemorrhaging, real hemorrhage in that area that could be an indication of manual strangulation or compression to the neck area which could have led to death by asphyxiation. But he conceded that the possibility that this was autopsy artifact was quite real and that it would have to be a throw away, he couldn't rely on it. And he based that, of course, on the fact that it was his view that the incisions made into that area and the opening up of the body was done improperly and could well lead to bleeding being there, that wasn't there before he opened him up , and that is basically this artificial – artifact. Dr. Smith agreed with me that if Paolo died as a result of neck or chest compression which suffocated him he would expect to see the following signs or as he put it, signals. And we talked basically about petechiael haemorrhaging and Dr. Smith said that he would expect to see some or all of the following: petechiae, which is again, spotty bleeding of the face, the eyelids, the conjunctival surfaces, the forehead, skin behind the ears, the eyes, the optic nerve, the nose, and the ears. Dr. Chan said he was well aware of the fact that there could be an asphyxial component to this death and that he specifically looked for these signals and found none of them. So when you put together the very real possibility of autopsy artifact with the hemorrhage in the thymus area and the fact that none of these expected signals were observed, you have to give no credence to the theory that Paolo was strangled or died as result of compression to the neck or chest area.

Reference: Defence Closing Address to the Jury, PFP018078, at pp. 277-278

766. In sum, it appears that Dr. Smith did attempt to explain the limits of the pathology findings upon which he was relying and offered the Court a variety of reasons to suggest that both of his possible explanations for Paolo's death were unlikely. No more could have been asked of Dr. Smith in these circumstances. He was invited to speculate; he offered two possibilities but qualified them appropriately and continued to maintain that he did not know how Paolo died.

8.04(3) The Timing of Paolo's Skull Fracture

767. It is alleged that Dr. Smith erroneously aged the left parietal fracture found on post mortem examination as "recent".

768. First, it is important to note that Dr. Smith clearly testified that he could not age the fracture itself on gross examination or miscroscopically due to the decomposition and possible artefacts from the long period of interment.

Reference: Dr. Smith's Trial Evidence, PFP017346, at p. 132, lines 6 to 16, p. 184, line 8 to p. 185, line 5
Dr. Smith's Written Evidence, PFP303346, at p. 80

769. In retrospect, Dr. Smith acknowledged that it would have been preferable to have simply left his answer at "I don't know". However, he attempted to assist the Court by drawing inferences from adjacent injuries. Specifically, he testified that one could examine the pattern of hemorrhage near the fracture and try to estimate the age of those bruises and then infer that the fracture occurred at the same time.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 80
Oral Testimony of Dr. Smith, 28/01/2008, p. 104, line 3 to p. 105, line 22
Dr. Smith's Trial Evidence, PFP017346, at p. 130, lines 3 to 7, p. 184, line 13 to p. 185, line 5

770. However, Dr. Smith acknowledged that his approach was "crude" and could only provide a broad time range of between 10 minutes to within a couple of days. He expressly testified that if the contusions were a couple of days old, then the head injury was not the lethal event.

Reference: Dr. Smith's Trial Evidence, PFP017346, at p. 130, lines 3-7, p. 184, line 13 to p. 185, line 5

771. Finally, and perhaps most significantly, Dr. Smith qualified this inferential approach by stating that he was not at all sure whether the two injuries (the skull fracture and the contusions) had occurred at the same time or at different times. As such, he could not offer any certainty to the theory that the contusion was caused by the same blunt impact injury that caused the skull fracture: "It could be, it may not have been".

Reference: Dr. Smith's Trial Evidence, PFP017346, at p. 130, line 24 to p. 132, line 16

772. As stated in Section 3.03, Dr. Smith's attempt to assist the Court was perhaps misguided, but in light of the limits of his forensic knowledge, his efforts should not be judged too harshly. Moreover, he clearly struggled with the certainty with which he held the view of the age of the skull fracture and attempted, however ineffectively, to qualify his evidence. As this Commission has heard, this struggle of certainty of opinion was not unique to Dr. Smith. In any event, there is simply no evidence that he was attempting to mislead the Court.

8.05 JENNA

8.05(1) Post Mortem Examination

773. Dr. Smith's autopsy report describes in detail his gross (internal and external), microscopic, toxicological and radiologic examinations.

Reference: Post Mortem Report, PFP011078

774. In his Medico-Legal report, Dr. Milroy states that "appropriate pathological and ancillary investigations were conducted" and "available for review", save and except for genital swabs and analysis of a hair discovered in Jenna's pubic area.

Reference: Medico-Legal Report of Dr. Milroy, PFP135465, at p. 4

8.05(1)(a) Decision not to take Genital Swabs

775. Dr. Smith testified that he did not believe it was necessary to take genital swabs in light of the findings on examination. Specifically, he testified that he performed a sexual abuse examination on Jenna – meaning, he examined the genitalia and elsewhere, seeking evidence of physical injury that may have been caused by sexual assault - and found no evidence of sexual assault.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 56-57
Evidence of Dr. Smith 28/01/2007, p. 113, line 23 to p. 114, line 8

776. Dr. Smith advised that it was not his practice to take swabs unless he was specifically requested to do so, or if he found injuries that were suggestive of sexual assault. In this case, he was not asked to take any swabs, was not advised that sexual assault was an issue and did not find any injuries suggestive of physical assault.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 56-57

777. In his examination, Dr. Smith was assisted by Dr. Dirk Huyer, a member of the HSC SCAN team. Noting that he would frequently attended autopsies at HSC when deaths involved forensic evaluations and discuss various aspects of the evaluation in a collegial manner with Dr. Smith, Dr. Huyer described his typical practice on attendance at autopsy as follows:

> When I would attend during autopsy procedures, Dr. Smith and I would generally examine the genitalia together. I would discuss the findings verbally with Dr. Smith. It was my impression that he would document the results of our examination. Given the age of the child, if there were no specific concerns of sexual abuse and there was no evidence of genital injury, I would not have likely recommended completion of specific forensic testing to evaluate for sexual contact. It is my opinion that without specific injury to the hymen, forensic finding of semen/sperm in the vaginal vault would be unlikely in a child of this age.

Reference: Letter from Dr. Huyer to Ms Doris, PFP136255, at p. 2
Dr. Smith's Written Evidence, PFP303346, at pp. 56-57
Evidence of Dr. Smith, 28/01/2008, p. 114, lines 9 to 23

778. Dr. Smith testified that both he and Dr. Huyer agreed that there were no obvious signs of sexual assault. In their opinion, the findings in the vaginal area were normal post mortem findings.

Reference: *Ibid*

779. Although Dr. Milroy appears to be of the view that the presence of a hair in the vaginal region necessitated genital swabs, it apparently was not the practice at HSC to do so. Indeed, Dr. Huyer testified that the presence of the hair in the vaginal region did, in and of itself, provide grounds to do a sexual assault kit.

Reference: Evidence of Dr. Huyer, 09/01/2008, p. 248, line 13 to p. 250, line 3

780. There was some suggestion at the Commission that Dr. Smith's statement that Dr. Huyer assisted with Jenna's post mortem examination was a recent fabrication. With respect, this suggestion is preposterous on the face of the evidence.

781. First, although Dr. Huyer does not recall the autopsy, he testified that he had no reason to doubt Dr. Smith's evidence that he was there.

Reference: Evidence of Dr. Huyer, 09/01/2008, p. 252, lines 15 to 25

782. Second, Dr. Smith's contemporaneous handwritten notes of the autopsy record Dr. Huyer's presence at the autopsy.

Reference: Dr. Smith's Handwritten Autopsy Notes, PFP011082, at p. 2

783. Third, Dt. Lemay's notes record his conversation on the day of the autopsy with the investigating coroner on the case. Therein, Dr. Thompson is recorded as advising Dt. Lemay that

there was no evidence of sexual assault and that Dr. Smith had obtained a second opinion from a "Sick Kids doc who is expert in that field".

Reference: Handwritten Notes of DC Lemay, PFP043640, at p. 4

784. Fourth, the absence of a consultation report from Dr. Huyer is irrelevant in light of the evidence at the Commission from a number of witnesses that it was not standard practice to obtain written consultation reports from those experts consulted. Dr. Huyer confirmed that he would only do reports if there were abnormal findings and/or he was specifically requested to do so.

Reference: See Section 4.02(2)
Evidence of Dr. Huyer, 10/01/2008, p. 13, lines 1 to 15

785. There has also been a suggestion that because the babysitter J.D. subsequently confessed to having sexually assaulted Jenna, that Dr. Smith and Dr. Huyer must have missed something at the initial examination.

786. However, Dr. Smith testified quite clearly that he could not rule out sexual interference in Jenna.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP074658, at pp. 29-30 and pp. 88-94

787. Second, Dr. Huyer was independently engaged by OCCO in 2004 to review the photographs taken at the autopsy and other relevant material, including excerpts from the Peterborough Civic Hospital record, and offer a fresh opinion as to whether Jenna had been sexually assaulted. He concluded as follows:

> The lack of specific injury to the genitalia of [Jenna] does not rule out possible sexual abuse but indicates that forceful penetrating injury did not occur…In summary, [Jenna] suffered multiple traumatic injuries in the time prior to her death. Examination of the genitalia did not demonstrate findings specific for sexual abuse.

Reference: Consultation Report of Dr. Huyer, PFP074309, at pp. 5-6

8.05(1)(b) The Decision Not to Submit Hair for Analysis

788. Dr. Smith has acknowledged that he erred in not documenting the presence of the hair, not directing that better photographs be taken of the hair and in not insisting that the police seize the hair for potential forensic testing.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 57-58
Evidence of Dr. Smith, 28/01/2008, p. 114, line 24 to p. 119, line 7

789. Dr. Smith attributes his lack of initiative in respect of the hair to his inadequate forensic training. Succinctly, he failed to appreciate the potential forensic value of the hair. Clearly, he was focused on the abdominal injuries which caused Jenna's death, significant details of which he provided in his post mortem report.

Reference: *Ibid*

790. However, Dr. Smith is not solely to blame for the decision not to submit the hair for analysis.

791. First, Dr. Milroy testified that it is not the responsibility of the pathologist to submit evidence for forensic analysis. This is the responsibility of the police.

Reference: Evidence of Dr. Milroy, 19/11/2007, p. 163, line 6 to p. 164, line 2

792. Second, the police were not relying on Dr. Smith to locate and identify the hair. In fact, the police were fully aware of the presence of the hair. The evidence demonstrates that the hair was brought to the attention of Cst. Rudback when he attended at the Peterborough Civil Hospital to take possession of the body. Sgt. Rudback's note states:

> While with Dr. Thompson, Nurse pointed out thread on vaginal area partly imbedded (inserted) between labia.

Reference: PC Rudback's Notes, PFP072916, at p. 3

793. Sgt. Rudback was not called as witness at the Commission. As such, the Commission has little evidence to explain why, having been advised of the presence of the "thread", that Sgt. Rudback decided not to seize it for analysis. He did seize and seal Jenna's clothing in an evidence bag.

Reference: *Supra*, at p. 6
Witness Statement of PC Rudback, PFP073993, at p. 1

794. It is reasonable to conclude however that Sgt. Rudback did not seize the "thread" because he believed that the hair was irrelevant to the investigation. Indeed, in a will-say statement given to D/Cst. Charmley, Sgt. Rudback acknowledged that he would have been "aware of the importance of [his] observations and would have taken the time to closely exam the object".

Reference: Witness Statement of PC Rudback, PFP073995, at p. 1

795. In these circumstances, it is not insignificant that Sgt. Rudback labeled the hair a "foreign object".

Reference: *Ibid*

796. It appears that Sgt. Rudback was not the only member of the Peterborough Police Service who knew that a hair had been found on Jenna's body. Apparently, Det. Lemay also knew of the hair and believed it was irrelevant. According to the Crown, Brian Gilkinson, he was advised of the hair by Det. Lemay early in the investigation:

> Q. And what was your first awareness of the hair issued, so to speak?
>
> A. Well, I was aware of the hair issue early on when Consta - - Constable Lemay and Sergeant McNeven were – - were involved in the original investigation, but I forgot about it … and then I remembered talking to Constable Lemay, and he indicated it was his information that there was some genetic defect that did not allow JD to grow pubic hair. And that was the basis on which it had apparently been discounted by the police as being a – - a factor.

Reference: Evidence of Mr. Gilkinson, 21/01/2008, at p. 72, line 2 to p. 73, line 2

797. Third, not only did the Peterborough Police know of the existence of the hair and decide not take any steps with respect to its analysis, so did the investigating Coroner, Dr. Thompson. Sgt. Rudback's note makes it clear that Dr. Thompson was present when a nurse drew their attention to the presence of the hair.

Reference: PC Rudback's Notes, PFP072916, at p. 3

798. There is no mention of the hair in Dr. Thompson's Warrant for Post Mortem Examination, nor was Dr. Smith directed to seize and submit the hair for analysis, although Dr. Thompson did request other samples to be taken by Dr. Smith.

Reference: Warrant for Post Mortem Examination, PFP053191, at p. 1

799. Further, there is no evidence before the Commission that Dr. Thompson took steps to have the hair analyzed independently, which was well within his authority to do.

800. Again, the Commission did not hear evidence from Dr. Thompson. As such, there is no explanation in evidence as to why he did not deem it necessary to have the hair analyzed. Again, it is reasonable to conclude that Dr. Thompson did not do so because he too believed that the hair was irrelevant to the investigation.

801. Dr. Smith testified that discussions at the autopsy led to the conclusion that the hair was a contaminant – that is, that the hair was likely left behind following resuscitation efforts. He believed it was Sgt. Kirkland who advised him of this, but could not be certain. He acknowledged that he spoke to others that day and the information may have come from somewhere else.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 57-58
Evidence of Dr. Smith, 28/01/2008, p. 114, line 24 to p. 119, line 7

802. Sgt. Kirkland denied that there was any discussion about the hair at the autopsy. However, it should be noted that Sgt. Kirkland *was present* at the autopsy *when the Dr. Smith seized the hair* and placed it in a sequentially marked evidence envelope. According to Cst. Kirkland's notes, the autopsy commenced at 13:00 on January 22 and was completed at 15:30. The seal on the evidence envelope records that it was sealed at 15:23 on January 22.

Reference: PC Kirkland's Notes, PFP072910, at pp. 3-4
Envelope with Hair, PFP170607, at p. 1

803. There is some reason to doubt Cst. Kirkland's recollection of the events at the autopsy. When he was first questioned by Dt. Charmley about his recollection of the autopsy and any discussion about the hair, he denied any memory of such a conversation. However, several hours later, he called Dt. Charmley back and advised him that he did recall a conversation with Dr. Smith that sounds quite similar to the one Dr. Smith claims to have had with Cst. Kirkland at Jenna's autopsy:

> "Received call back from Scott Kirkland. Did recall one autopsy with Dr. Smith, not sure if male or female, in which Smith indicated a fiber was found in the vaginal or groin area, but that this was common from clothing and was not significant. Did not recall anything further."

Reference: [redacted] Homicide Review, Book #1, PFP072719, at p. 27

804. At the Commission, Cst. Kirkland stated definitively that the autopsy at which he and Dr. Smith discussed a fibre was not Jenna's autopsy. In fact, Cst. Kirkland was able to identify at which autopsy this conversation supposedly occurred. However, Cst. Kirkland admitted that he had never advised anyone of this specific recollection prior to testifying at the Commission, including Commission Counsel when he was interviewed by them immediately prior to his testimony.

Reference: Evidence of Cst. Kirkland, 15/01/2008, at p. 136, line 3 to p. 138, line 19

805. Query whether Cst. Kirkland's memory is mistaken and that the conversation he remembers having with Dr. Smith was, in fact, at Jenna's autopsy. Such a conversation and the resulting conclusion would be consistent with Detective Lemay's advice to Mr. Gilkinson and Cst. Rudback's notes. Query whether Cst. Kirkland told Dr. Smith precisely the same thing - that is, that the hair was irrelevant.

806. In any event, the Commission did not hear evidence from many of the individuals who might be capable of shedding some light on why the hair was not seized by the police, not seized by the Coroner, seized but not submitted for analysis by Dr. Smith and not analyzed by the Crown, Mr. Gilkinson.

807. What is abundantly clear is that four of the fundamental players in the death investigation were aware of the hair and decided not to submit it for analysis: the police, the Coroner, Dr. Smith and the Crown Attorney. The decision should not be attributed entirely to Dr. Smith, although he has accepted responsibility for his omission in this respect.

808. Moreover, it should be noted that the hair once analysed did not play a role in the ultimate resolution of the investigation.

Reference: Evidence of DC Charmley, 15/01/2008, p. 75, lines 7 to 12

8.05(2) Care and Custody of the "Hair"

809. Notwithstanding his error in not recording his discovery of the hair and not ensuring that it was taken by the police for possible analysis, Dr. Smith did in fact seize the hair, sealed it in an evidence envelope and kept the hair sealed and in his possession for four years.

Reference: Envelope with seal, PFP170607
[redacted] Homicide Review, PFP011009, at p. 33
Evidence of DC Charmley, 15/01/2008, p. 182, lines 13 to 19

810. In light of the evidence that there were no written policies applicable to issues regarding continuity of evidence and that pathologists generally remained custodians of key evidence seized from post mortem examinations, it can hardly be said that Dr. Smith failed to maintain adequate care and custody of the hair.

Reference: See Section 4.02(1)

8.05(3) Were Dr. Smith's Findings Reasonable?

811. There has been no evidence that Dr. Smith's findings on examination were unreasonable or in error. In fact, Dr. Milroy concluded that Dr. Smith's description/interpretation of the injuries reasonably matched both the photographs and the histology.

Reference: Medico-Legal Report of Dr. Milroy, PFP011090, at p. 2

8.05(4) Cause of Death

812. Both Drs. Milroy and Pollanen testified that Dr. Smith's cause of death: blunt abdominal trauma was reasonable.

Reference: Evidence of Dr. Milroy, 19/11/2007, p. 128. line 23 to p. 129, line 2
Consultation Report of Dr. Pollanen, PFP072613, at p. 10

8.05(5) Post Mortem Report

813. Dr. Milroy described Dr. Smith's post mortem report as "detailed". Indeed, it is 13 pages in total, much of it single-spaced.

Reference: Medico-Legal Report of Dr. Milroy, PFP135465, at p. 5
Post Mortem Report, PFP011078

814. Dr. Milroy offered two criticisms of Dr. Smith's report:

(a) The report contained no opinions regarding the key issues that would aid the investigation – namely time of injuries and causation of injuries; and

(b) No exhibits were recorded in the reports and therefore continuity of evidence could not be provided from the autopsy report.

Reference: Medico-Legal Report of Dr. Milroy, PFP135465, at p. 8

815. Both of these criticisms are unfair in light of the evidence at the Commission as to the standard style and format of post mortem reports in Ontario in the 1990s. It was not the standard for pathologists to offer any opinions in post mortem reports other than an opinion with respect to cause of death.

Reference: See Section 4.02(4)

816. Likewise, the post mortem report Form 12 did not include a section for exhibits taken at the post mortem report and the post mortem reports contained in the record demonstrate that it was not the practice of pathologists to include this information in their reports. Several pathologists noted that they adopted their own system of recording exhibits as there was no mandated requirement to do so.

Reference: *Ibid*

8.05(6) Consultations

817. Dr. Smith is criticized for not documenting his consultation with either Dr. Jay, the neuropathologist or Dr. Huyer, HSC SCAN member.

Reference: Medico-Legal Report of Dr. Milroy, PFP135465, at pp. 5 and 7

818. Again, as noted in Section 4.02(2), it was common for pathologists to incorporate the findings of these consultants in their post mortem reports without attribution.

8.05(7) Opinion on Timing of Fatal Injuries

819. Dr. Smith has been criticized for failing to reasonably interpret the histology of Jenna's abdominal injuries to conclude that her fatal injuries were inflicted within six hours of her death. Instead, in an oft-cited statement, Dr. Smith is alleged to have opined that Jenna's injuries were 24-48 hours old.

Reference: Evidence of Dr. Milroy, 19/11/2007, at p. 140, line 9 to p. 141, line 4
Evidence of Dr. Pollanen, 13/11/2007, p. 79, line 3 to p. 81, line 13
Medico-Legal Report of Dr. Milroy, PFP135465, at pp. 6 – 7
Autopsy Report Review Form, PFP011090, at p. 1

820. Succinctly, this is a gross mischaracterization of Dr. Smith's opinion as to the timing of the fatal injuries for two reasons:

(a) Dr. Smith never stated that <u>all</u> of Jenna's abdominal injuries were 24-48 hours. In fact, he provided a much wider window of between 4-32 hours, acknowledging that some of the wounds were recent; and

(b) Dr. Smith never stated that all of Jenna's abdominal injuries occurred at one time. Rather, he testified that it was quite possible that they could have been inflicted on multiple occasions during the window of 4-32 hours.

Reference: Preliminary Hearing Evidence, PFP074658, pp. 33-48, 57-59 and 114-118
Dr. Smith's Written Evidence, PFP303346, at pp. 59-60
Evidence of Dr. Smith, 28/01/2008, p. 110, lines 1 to 16 and p. 111, lines 19 to 24

821. Dr. Smith's opinion on the timing of injuries was reasonable for five reasons. First, the dating of injuries based upon histology is neither foolproof, nor precise. Dr. Pollanen identifies it as a challenging issue for pathologists.

Reference: Evidence of Dr. Pollanen, 13/11/2007, p. 82, lines 5 to 16

822. Second, the challenge of dating injuries is particularly acute in respect of pediatric abdominal injuries because there are no good standards for the evolution of intra-abdominal inflammatory changes in children and, as such, time estimates based on histology are based more on opinion than on scientific experiment.

Reference: Consultation Report of Dr. Feldman, PFP011159, at p. 5
Evidence of Dr. Pollanen, 06/12/2007, p. 77, line 16 to p. 79, line 11

823. Third, there is no dispute that Dr. Smith's findings on histology were correct – that some of the abdominal injuries showed no signs of healing reaction and as such, were quite recent, whereas the liver injury showed definitive signs of healing and could be as much as several days old.

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 88, line 1 to p. 92, line 21, p. 94, line 2 to p. 95, line 4

824. Fourth, both Drs. Milroy and Pollanen acknowledged that they could not exclude the liver injury as contributing to Jenna's death.

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 95, line 5 to p. 97, line 2
Evidence of Dr. Milroy, 21/11/2007, p. 185, line 19 to p. 186, line 24

825. As such, Dr. Smith was faced with a quandary. He had a potentially lethal injury that could be as much as 48 hours old, sitting adjacent to other abdominal injuries that were likely quite recent. He testified that because he could not exclude the liver injury as contributing to Jenna's death, he was not able to narrow down the window of time the injuries could have been inflicted.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 59
Evidence of Dr. Smith, 28/01/2008, p. 111, lines 4 to 18

826. Dr. Pollanen acknowledged that when faced with more than one potentially lethal injury, some pathologists list all of the potentially lethal injuries as contributing to death as a matter of principle.

Reference: Evidence of Dr. Pollanen, 06/12/2007, p. 79, line 12 to p. 82, line 16 and p. 82, line 24 to p. 83, line 10

827. Thus, Dr. Smith's opinion was within the range of reasonable opinions – he was not prepared to exclude the liver as a potential contributing factor to Jenna's death and as such, his window of time that the injuries could have been inflicted had to include the range for the liver injury. As stated above, Dr. Smith did not state that all of the injuries occurred at the same time as the liver injury; rather, he simply noted that one of the potentially fatal injuries could have been as old as 48 hours.

828. Fifth and finally, Dr. Smith's range of time in which the potentially fatal injuries could have been inflicted was consistent with the other evidence obtained from the investigation. There is clear and unequivocal evidence that Brenda Waudby assaulted Jenna on the evening of January 20, some 24-28 hours prior to her death. This assault, as described by Brenda herself in a cautioned statement, could very clearly have caused Jenna's liver injury:

> Brenda was home alone with Jenna and Justine. Brenda was frustrated with her life and upset over her relationship with Randy and problems he was causing her. She was further feeling pressure from the CAS, largely initiated by Randy. She smoked some marihuana, which she described as good Kimo weed. Jenna was crying excessively and would not go to sleep in her crib. Brenda let her cry for a while hoping that she would go to sleep and cuddled with her, but neither worked. Brenda started to yell at Jenna to go to sleep and she expressed feelings of being confused, mad, angry and pissed off. Eventually, Brenda pushed Jenna down in her crib, but Jenna stood back up and laughed. She also remembers picking Jenna up and her back giving out causing her to drop Jenna, then Jenna falling onto the crib rail around her stomach area and landing back in the crib. She was trying to keep Jenna lying down, by keeping her hand on Jenna's back, but Jenna kept struggling to get back up. At some point, Brenda loses her composure and starts swinging her arms at Jenna. She believes she hit Jenna once or twice, and possibly more. Brenda has a memory loss for what she believes to be about 20 minutes. The next thing Brenda remembers is Jenna lying in her crib crying. Brenda knew she did something wrong and could not tell anyone. She would express that she never meant to hurt Jenna and that this was the first time she had lost her temper like this. Brenda knew that Jenna was hurt bad enough that she should have taken her to the hospital. Brenda would then leave Jenna's room and Jenna cried herself to sleep.

Reference: [redacted] Homicide Review, PFP011009, at pp. 7-8

829. There was also evidence that Jenna may have suffered harm during the time JD was caring for her. This dual opportunity, consistent with Dr. Smith's evidence, troubled the police:

> Information has been collected during the investigation that leads one to believe that either Brenda or JD could be capable of causing Jenna's injuries. D/Cst. Charmley is completely convinced that Jenna was abused by Brenda over a period of time and during the evening of 20th of January 1997. D/Cst. Charmley is also satisfied that JW was having some behavioural problems when he was 14 years old and was probably not the best choice to babysit. Medical opinions are varied and although it is highly likely that Jenna's abdominal injuries happened closer to the time of her death, rather than 24-48 hours prior, it is still possible that they occurred in either Brenda or JW's care. Medical opinion has not been able to solidify that Jenna's injuries absolutely only occurred during JW's care. Therefore, given the admission of assault by Brenda some 24-28 hours prior to Jenna's death, and no admission from JW, issues of reasonable doubt are obvious for both.
>
> **Reference:** [redacted] Homicide Review, PFP011009, at p. 51

830. As Dr. Smith stated from the outset of the investigation, the only way to narrow the window of time when the fatal injuries were likely inflicted was to obtain a clinical opinion. Dr. Smith is not an expert in living children and as such, he would defer to a clinician. That said, based on pathology alone, he remains of the view that his opinion was reasonable and, based on the evidence at the Commission, that opinion cannot be said to have been "unreasonable".

8.05(8) Dr. Smith's Opinion to Police

831. Dr. Pollanen concluded that Dr. Smith's "faulty diagnosis" on the timing of the fatal injuries "delayed the prosecution and conviction of the true perpetrator of the crime". With the greatest of respect, this is an oversimplification of the death investigation.

> **Reference:** Pollanen, "The Smith Review", PFP032588, at p. 3

832. First, and foremost, Dt. Charmley confirmed that the police did a very thorough investigation of the babysitter and specifically, "did everything to try to prove the babysitter was responsible". Specifically, the police took the following investigatory steps specifically related to the babysitter:

(a) attended the playground where the babysitter had taken Jenna to conduct a scene investigation;

(b) obtained a warrant to inspect and seized notes, photos and took a video of the babysitter's home;

(c) interviewed the babysitter on multiple occasions;

(d) attempted to conduct a polygraph test on the babysitter;

(e) interviewed other witnesses who might have had occasion to observe the babysitter on the night of Jenna's death, including Jenna's sister, the friends of the babysitter who visited the night of the death and the babysitter's mother; and

(f) seized the babysitter's counseling records.

Reference: Evidence of DC Charmley, 15/01/2008, at p. 107, line 5 to p. 112, line 16

833. Based on his own review of the investigation, Dt. Charmley did not identify any inadequacies in the investigation of the babysitter:

> MS LANGFORD: And so, Sergeant Charmley, you would agree with me that there is simply no evidence to support the allegation that the police either did not investigate the babysitter or inadequately investigated the babysitter at any time during the investigation?
>
> DC CHARMLEY: Absolutely not.
>
> MS LANGFORD: And they certainly didn't fail to investigate the babysitter or adequately investigate the babysitter on the basis of advice - - on the basis of advice received from Dr. Smith?
>
> DC CHARMLEY: No, they continued to investigate the babysitter…I don't think [Dr. Smith] ever advised them not to investigate the babysitter.
>
> **Reference:** Evidence of DC Charmley, 15/01/2008, p. 112, line 17 to p. 113, line 10

834. Second, the fact that JD was not arrested and charged for Jenna's death was not only because Dr. Smith's opinion as to the time of death extended beyond the time that JD could exclusively be responsible, but also because the police simply did not believe he was responsible for Jenna's death. Dt. Charmley acknowledged this in his Homicide Review Report and in his testimony:

> D/Cst. Charmley believes that the initial investigators were open-minded about who could be a possible suspect in the initial stages of the investigation. As things progressed and evidence and information was collected and investigated, Brenda Waudby and [the babysitter] would become the obvious 2 prime suspects. Although [the babysitter] was considered a suspect, the information being gathered was more substantial and suggestive that Brenda was responsible for Jenna's death. Investigators would have several interviews with [the babysitter] and his family, which would also include polygraphs, hypnosis and interrogations. [The babysitter] who was only 14 years old at the time of Jenna's death, would remain cooperative with police and express confidence that he had done

> nothing wrong. The only physical act admitted by [the babysitter] immediately was the accidental hairdryer burn. Although [the babysitter] was having some behavioural problems at the time, it is difficult to believe that [the babysitter] would have been able to deceive police investigators [as] long as he did.

Reference: [redacted] Homicide Review, PFP011009, at p. 49

See also: Evidence of DC Charmley, 15/01/2008, p. 107, line 5 to p. 112, line 16

835. The opinion of the police in respect of the babysitter is to be contrasted with the opinion the police held with respect to Brenda Waudby:

> Police were informed early in the investigation that Jenna was the victim of child abuse. Brenda was a known cocaine and drug user being monitored by CAS as a result of previous neglect issues. Although Brenda would initially deny causing Jenna's injuries, she would later discuss having a lapse of memory. She would then admit to being frustrated with Jenna on the evening of the 20th of January 1997 and swinging her arms at Jenna and having a memory lapse of 20 minutes. Brenda knew she hurt Jenna bad enough that she should have taken her to the hospital and she could not tell anyone. Brenda was the only person who admitted to any wrongdoing and her admission was consistent with an opinion on the timing of injuries by Dr. Smith. Therefore, based on the information available to the police, it is apparent that they made the correct decision to charge Brenda with Jenna's death.

Reference: [redacted] Homicide Review, PFP011009, at p. 49

836. Third, from the outset of the investigation, Dr. Smith advised the police that it would be prudent to obtain as much evidence as possible about Jenna's last 24 hours of life so that a co-relation could be made between her injuries and her symptoms. This would assist in identifying potential suspects.

Reference: General Occurrence Report, PFP072630, at p. 6
Memo-book Notes of DC Lemay, PFP043640, at pp. 7-8
Dr. Smith's Written Evidence, PFP303346, at p. 59

837. Dr. Milroy has confirmed that this advice was appropriate.

Reference: Evidence of Dr. Milroy, 19/11/2007, p. 126, line 1 to p. 127, line 12

838. Dr. Smith then advised the Crown that a clinical opinion might be useful to narrow the window of time the injuries could have been given. That a decision was made not to obtain a clinical opinion until following the preliminary hearing is not the fault of Dr. Smith. He cannot be held responsible for the decisions taken by either the police or the Crown in this case.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 59

8.05(9) Evidence at the Preliminary Hearing

839. Dr. Smith has acknowledged that his evidence was difficult to understand and likely led to some confusion. However, he did testify as follows:

(a) There were multiple potentially lethal abdominal injuries and he could not exclude any of the injuries to the pancreas, duodenum, mesentery or liver as potentially contributing to Jenna's death;

(b) All of the potentially lethal injuries except for the liver injury appeared to have occurred within 2-8 hours; and

(c) The liver injury was older and presented a conundrum because it sits adjacent to the other abdominal injuries and yet demonstrates clear signs of having been caused between 6-32 hours earlier.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 59-60
Evidence of Dr. Smith, 28/01/2008, p. 113, lines 9 to 22

840. It has been suggested that he misled the Trier of fact with respect to his evidence regarding the hair, his handwritten notes and whether he took vaginal swabs.

841. Dr. Smith was asked during his evidence whether he was aware that the Peterborough Civic Hospital staff had discovered a "pubic" hair in Jenna's vaginal area when Jenna was first examined at the hospital. Dr. Smith was not aware that there was a concern raised by the clinicians about a "pubic hair".

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP074658, at pp. 88-97

842. He was then asked whether he had been advised by the police that a "pubic hair" was found. In light of the context in which he was asked about the hair, it is understandable that Dr. Smith might

not have connected the clinicians' concerns about a "pubic" hair found in the vaginal area on admission to the hospital with what he saw and discussed with police – that is - a truncal hair that he had found on Jenna's body at the post mortem examination which was thought to be a contaminant.

Reference: *Ibid*

843. If Dr. Smith had wanted to conceal the existence of the hair, he could have simply destroyed the evidence. Instead, he seized the hair, kept the envelope and when called and specifically asked about whether he had found a hair found in the vaginal area, he advised Dt. Charmley immediately, without hesitation. It simply does not stand to reason that Dr. Smith would have so readily admitted that he had the hair if he was trying to conceal its existence.

Reference: [redacted] Homicide Review, PFP011009, at p. 33

844. Dr. Smith was also asked about whether he had any notes of the post mortem examination during his testimony. He replied that he did not have any and that his report was typed directly into a laptop computer.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP074658, at pp. 53-54

845. Dr. Smith testified that his practice was variable with respect to whether he took handwritten notes at a post mortem examination or simply typed directly to his laptop. Indeed, there is evidence before the Commission that he did both.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 60

846. It is likely that Dr. Smith simply forgot that in this case he did take handwritten notes.

Reference: *Ibid*

847. Moreover, Dr. Smith testified that when he prepared to give evidence at a preliminary hearing, he usually printed a copy of his report off of his computer. He did not usually review his

pathology file in which any handwritten notes or other material were stored. For this reason, when he testified at the preliminary hearing, he believes he was not aware that he had any notes from the post mortem examination.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 60

848. Again, Dr. Smith would have no interest in misleading the Court with respect to whether he did or did not have notes. He would have nothing to hide from his notes as they corroborate his observations.

849. Finally, during his testimony, Dr. Smith was asked whether or not he took vaginal swabs. He replied that he had no record of having done so and therefore, he did not know. Admittedly, a more fulsome post mortem examination report would have enabled him to say definitely that he had not done so. Presumably, had he had the entire file with him when he testified, he would have known whether swabs were done because his file would have contained the CFS submission sheets and/or a test result. But, as stated above, Dr. Smith did not have his file with him when he testified and as such, he simply did not know.

8.05(10) The CPSO Proceedings

850. Dr. Smith made two substantive written submissions to the College of Physicians and Surgeons of Ontario ("CPSO") in response to Brenda Waudby's complaint: December 21, 2001 and April 11, 2002. Together, these letters provide an accurate account of Dr. Smith's recollection of Jenna's autopsy.

Reference: Letter from Dr. Smith to Ms Doris, PFP053096
Letter from Dr. Smith to Ms Doris, PFP146464

851. It is suggested that Dr Smith was attempting to mislead the CPSO in respect of whether or not he took vaginal or anal swabs. With respect, this allegation is unfounded.

852. Dr. Smith never advised the CPSO that he had taken vaginal or rectal swabs, or that he had used a sexual assault evidence kit. Indeed, in his letter of April 11, 2002, he expressly advised the CPSO that the only sample taken was a hair:

> The only physical evidence that was present was a hair or fibre that was allegedly noted to have been seen on the lower abdomen at the end of resuscitation at Peterborough Civic Hospital. Even though it was reported to me to be a contaminant, I collected, sealed and stored it appropriately…

Reference: Letter from Dr. Smith to Ms Doris, PFP146464, at p. 3

853. The "appropriate sampling" to which he referred in his letter of December 21, 2001 was the hair, which was in fact seized at the autopsy and held in Dr. Smith's custody until it was released to D/Cst Charmley in 2002. This is very clear from the content of his December 2001 letter. He refers to the fact that the sample obtained was not taken by the police for analysis but rather remained in his care. There is little doubt that Dr. Smith was referring to the hair.

Reference: Letter from Dr. Smith to Ms Doris, PFP053096, at p. 2

854. When asked by the CPSO to clarify what he meant by "appropriate sampling", Dr. Smith was clear that it did not include vaginal or anal swabs.

Reference: Letter from Dr. Smith to Ms Doris, PFP146464

PART 9 - HEAD INJURY CASES

9.01 INTRODUCTION

855. Seven of the nineteen cases considered by the Commission which concerned possible non-accidental head injury.

Reference: Medico-Legal Report of Dr. Whitwell re Amber, PFP300000
Medico-Legal Report of Dr. Whitwell re Dustin, PFP136005
Medico-Legal Report of Dr. Whitwell re Gaurov, PFP136013
Medico-Legal Report of Dr. Whitwell re Kasandra, PFP136020
Medico-Legal Report of Dr. Whitwell re Taylor, PFP136030
Medico-Legal Report of Dr. Crane re Nicholas, PFP135519
Medico-Legal Report of Dr. Crane re Tyrell, PFP135538

856. The evidence at the Commission, including evidence from the reviewers themselves, demonstrated that for the most part the reviewers were unduly harsh in their criticisms of Dr. Smith's opinions in relation to these cases.

857. Indeed, regarding Dr. Helen Whitwell, who provided opinions in five of the seven head injury cases, it was clear that she is very much in the category of those experts who are skeptical that many head injuries are the result of non-accidental causes, and her capacity to approach her review of the cases impartially is seriously questioned.

Reference: Medico-Legal Report of Dr. Whitwell re Amber, PFP300000
Medico-Legal Report of Dr. Whitwell re Dustin, PFP136005
Medico-Legal Report of Dr. Whitwell re Gaurov, PFP136013
Medico-Legal Report of Dr. Whitwell re Kasandra, PFP136020
Medico-Legal Report of Dr. Whitwell re Taylor, PFP136030

858. It is not an overstatement, and was conceded in a number of cases by Dr. Whitwell herself, that Dr. Smith’s opinions which had been characterized as mistakes were in fact reasonable at the time rendered having regard to the nature of the injuries found by him on post mortem examination.

859. Furthermore, there is no question that she, and Dr. Crane who reviewed the remaining two cases, approached their review of Dr. Smith’s opinions on the basis of the current state of the

knowledge without affording Dr. Smith, at least initially, the benefit of placing his opinions in the context of the evolving state of the knowledge at the time that he provided the opinions in question.

860. As stated above in Section 3.02, it is in the nature of the discipline that knowledge grows with time in the science of forensic pathology. An inevitable corollary of this evolution of knowledge is that conclusions as to cause and effect will change over time. These changes in thinking may have consequent effects where actions have been premised on interpretations of factors that must be revised in light of later learning. As expressed by Dr. Pollanen:

> We need to recognize that forensic pathology is a progressive discipline and that developments in knowledge may produce legal controversies.
>
> **Reference:** Evidence of Dr. Pollanen, 05/12/2007, p. 33, lines 14 to 22
> Pollanen, "Systemic Issues", PFP301189, at p. 3

861. It is worthwhile to underline the relatively short timeframe during which this body of knowledge has been growing. As expressed in Pediatric Forensic Pathology: Limits and Controversies:

> Many of the types and causes of death in children that are commonly recognized today, including some that are relevant to intentional harm, have only been characterized and accepted in the past 30 to 40 years. For example, the entity of child abuse itself is regarded as being first described in modern times by Caffey in 1946.
>
> **Reference:** Cordner, "Pediatric Forensic Pathology", PFP301639, at pp. 31 - 32

862. Unquestionably, one of the areas that has been the subject of research and development has been the phenomenon of non-accidental head injury, including traumatic injury, shaken baby syndrome ("SBS"), and short falls. Dr. Pollanen has noted that among the "controversies, challenges or enigmas in forensic pathology and pediatric forensic pathology" is:

> The evolving nature of forensic pathology of infantile head injury including the so-called 'shaken baby syndrome'.
>
> **Reference:** Evidence of Dr. Pollanen, 05/12/2007, at p.34, lines 4 to 16
> Pollanen, "Systemic Issues", PFP301189, at p. 3

863. Furthermore, this body of knowledge continues to evolve. As acknowledged in Pediatric Forensic Pathology: Limits and Controversies, authored in 2007:

> Issues around Shaken Baby Syndrome, whether short falls can cause fatal injury, and many others are not settled and it will be many years before there is a completely uniform approach to them.
>
> **Reference:** Cordner, "Pediatric Forensic Pathology", PFP301639, at p. 32

864. Having regard to this growth of knowledge any consideration of the reasonableness of an opinion concerning questions of non-accidental head injury have to be judged against the state of knowledge at the time. In this regard, for example, Dr. Pollanen confirmed that:

> Many of Dr. Smith's views on shaken baby syndrome were similar to a prevailing view in this controversial area of forensic pathology at the time he gave testimony on the issue.
>
> **Reference:** Pollanen, "The Smith Review", PFP032588, at p. 4

865. A consideration of traumatic head injury overlaps with a discussion of SBS. The reason for the overlap is succinctly stated in Lord Goldsmith's Report on the Review of Infant Death Cases, at paragraph 43:

> The term 'shaken baby syndrome' has become very widely used throughout the world to describe a category of non-accidental injury believed to result from severe shaking of a baby or small infant, associated for some commentators with impact of the head. This term is open to objection; it is not so much a medical diagnosis as an explanation for an injury. There is not agreement on exactly what injury patterns do or do not fall into this category. There is a particular debate over the issue whether the injuries can be the result of shaking alone or whether shaking with impact is involved (although the view can be held that this may be a sterile debate as all shaking is likely to involve some impact (chin on chest wall or back of head on spine). As a result, other terms are also in use, including shaken impact syndrome, whiplash shaking syndrome and abusive head trauma.
>
> **Reference:** The Review of Infant Death Cases, PFP300329, at p. 10-11

866. SBS cases are characterized by typical physical evidence of the cause of death. These findings will commonly be subdural haemorrhage, retinal haemorrhage and hypoxic encephalopathy, also referred to as cerebral edema, meaning swelling and resultant brain damage due to lack of oxygen to the brain.

> **Reference:** Evidence of Dr. Pollanen, 05/12/2007, p. 212, lines 1 to 12

867. To refer to the history of the term SBS briefly, in part to emphasize how short that history has been, the diagnosis was coined by Caffey in 1974. Its origin is explained in the Report on Lord Goldsmith's Review as follows:

> … In the early 1970's Guthkelch noted that not all infants with subdural haematoma had external marks of injury on the head and postulated that they could be produced by shaking rather than being struck. In 1972 Caffey suggested that the cause of the haematoma in cases where there was no sign of external trauma to the scalp was whiplash shaking and he coined the term 'whiplash shaken infant syndrome' [in 1974]. The view was, and still is, held by many that the forces needed to create such injuries are very substantial and are not consistent with normal handling or accidental treatment. The existence of these injuries is therefore taken as evidence of criminal behaviour by inflicting deliberate, violent and obviously inappropriate shaking of the child.

Reference: The Review of Infant Death Cases, paragraph 47, PFP300329, at p.11

868. Regarding the forces required to produce subdural haemorrhage, this has been the subject of continuing study over the period that the diagnosis has existed, and the clear consensus is that the forces necessary to cause this type of injury are considerable. Duhaime et al. reported in 1999 that "this sort of injury is unlikely to be inflicted 'accidentally' by well-meaning caretakers who do not know that their behaviour can be injurious". As recently as 2005, Punt argues "that there is no evidence that the application of any force that would be regarded as proper by a reasonable, responsible, average carer in the course of everyday childcare might produce [subdural haemorrhage]."

Reference: Cordner, "Pediatric Forensic Pathology", PFP301639, at pp. 94 and 107

869. A related issue is the question of whether chronic subdural haemorrhages can spontaneously re-bleed and cause death. It is accepted that clinically silent or asymptomatic subdural haemorrhage can occur at birth. The controversy centres around whether such clinically insignificant subdural haematomas can re-bleed causing serious sequelae without injury. The question is addressed in Pediatric Forensic Pathology: Limits and Controversies as follows:

> The controversy centres on whether spontaneous re-bleeding of chronic subdural hematomas can cause catastrophic clinical deterioration and death. Studies into the histological evolution of subdural haemorrhages suggest that re-bleeding is capillary in origin, under low pressure and would therefore be of insufficient volume to become a space occupying lesion. In contrast, acute subdural hematomas result from tearing of larger bridging veins leading to more rapid hemorrhage and the accumulation of larger volumes of blood before the bleeding stops.
>
> **Reference:** Cordner, "Pediatric Forensic Pathology", PFP301639, at pp. 108

870. As pointed out previously, traumatic head injury overlaps with shaking. In effect, there is a continuum, from no observable external injury at one end to very severe external injury at the other. Thus, as Lord Goldsmith notes in his Report, "there could be, in some cases, strong evidence of abuse from other evidence, such as witnessed abuse or the presence of other injuries." In the same vein, as expressed in Pediatric Forensic Pathology: Limits and Controversies:

> There is a point at which most forensic pathologists will agree that non accidental injury is the most appropriate conclusion in a particular case of fatal blunt head injury; for example when there is a multiplicity of injuries, often occurring over a period of time, clearly at odds with the provided history.
>
> **Reference:** The Review of Infant Death Cases, PFP300329, at p. 12
> Cordner, "Pediatric Forensic Pathology", PFP301639, at p. 105

871. The three injuries associated with SBS, namely subdural haemorrhage, retinal haemorrhage and encephalopathy have come to be known as the "triad". There has been, and continues to be a widely-received view that the presence of the triad of injuries in and of itself is a good marker for SBS.

> **Reference:** Evidence of Dr. Pollanen, 05/12/2007, p. 212, line 16 to p. 213, line 10

872. The thesis, variously referred to as the "conventional theory", or the "classical view", is that with infant head injury, when one finds the triad, one has the basis for a diagnosis of SBS, and thus homicide. As expressed by Lord Goldsmith in his Addendum to the Report on the Review of Infant Death Cases (the "Addendum"):

> According to conventional theory – which the Court of Appeal termed the accepted hypothesis – the presence of these injuries [subdural haemorrhaging, retinal haemorrhaging and encephalopathy] is considered indicative of the child having been unlawfully mistreated by violent and obviously

excessive (and therefore unlawful) shaking, sometimes accompanied by impact injuries as well. It is these circumstances which have been called Shaken Baby Syndrome or similar expressions.

Reference: Evidence of Dr. Pollanen, 05/12/2007, at p. 214, line 17-24
The Review of Infant Death Cases – Addendum to Report – Shaken Baby Syndrome (hereinafter referred to as the "Addendum"), PFP033302, at p. 5

873. More recently, a "contrary" or "skeptical" view of the issue has been postulated that has called into question whether the injuries comprising the triad could be produced without the application of unlawful force. This school of thought was advanced in a series of papers authored by Dr. Jennian Geddes, with Dr. Helen Whitwell as a co-author, culminating in their paper published in 2003 in which they characterize their theory as "the unified hypothesis".

Reference: Geddes et al. Dural haemorrhages in non traumatic infant deaths: Does it explain the bleeding in Shaken Baby Syndrome?, PFP301299
Cordner, "Pediatric Forensic Pathology", PFP301639, at pp. 99-100

874. These contradictory views have produced what Dr. Pollanen referred to in his evidence as "a heated debate". On the one hand, many experts continue to hold to the traditional view that the triad, and even retinal haemorrhages in the absence of the other injuries making up the triad, are sufficient for a diagnosis of SBS. On the other hand, in recent years there are experts who are opponents of SBS altogether, and who view it as a flawed concept, for whom SBS is misdiagnosed even in the presence of the injuries making up the triad.

Reference: Evidence of Dr. Pollanen, 05/12/2007, p. 215, line 7 to p. 218, line 2
Evidence of Dr. Whitwell, 13/12/2007, p. 138, line 20 to p. 139, line 10
Shaken Baby Syndrome: New Problems, PFP301205, at p. 6

875. This debate, and specifically the question of the recent diverging medical opinion stemming from Geddes et al.'s unified hypothesis, was considered in depth by the United Kingdom Court of Appeal in a hearing dealing with appeals of four convictions in cases involving SBS. Although the cases necessarily contained their own particular features, it was common to all four that an attack was mounted on the conventional theories of SBS.

Reference: Addendum, paragraphs 2 and 5, PFP033302, at pp. 2 and 5

876. The Judgment following that hearing, referred to as *R. v. Harris*, was delivered by the Court of Appeal on July 21, 2005. As noted in Lord Goldsmith's Addendum, at paragraph 8:

> The Court of Appeal examined in detail evidence from a large number of experts. In support, the appellants called before the Court of Appeal expert evidence. In all the Appellants called or asked the Court to consider 11 experts. The prosecution called or asked the Court to consider, in its turn, 14 experts. The experts called included Dr. Geddes. … The evidence given was carefully examined by the Court of Appeal over a number of days. It was in a very good position, therefore, to reach conclusions on some of the hotly disputed medical issues that have been found in the medical literature on this issue.

Reference: Addendum, PFP033302, at p. 6

877. The UK Court of Appeal went on to state a number of significant conclusions which were summarized in Lord Goldsmith's Addendum as follows, at paragraph 10:

> The first was to note that a theory which had been apparently been put forward by Dr. Geddes that the triad of injuries could be the result of no application of force at all was rejected. This theory had been put forward by Dr. Geddes in her third paper but had been hotly disputed. In her evidence to the Court, however, Dr. Geddes conceded that her third paper could not be put forward as a proven theory but was no more than a discussion document.

Reference: Addendum, PFP033302, at p. 7

878. What the Court of Appeal actually stated in its Judgment in this regard was as follows:

> In our judgment, it follows that the unified hypothesis can no longer be regarded as a credible or alternative cause of the triad of injuries.

Reference: Addendum, PFP033302, at p. 7
R. v. Harris [2005] E.W.C.A. Crim 1980, PFP151105, at p. 17 (para. 69)

879. The Court of Appeal was nonetheless obliged to address the question of the degree of force required to produce the triad of injuries. Its conclusions on this subject are best summarized in Lord Goldsmith's Addendum, at paragraphs 12 through 14 as follows:

> 12. In approaching this question, the Court started from some basic, though important, general propositions:
>
> 12.1 That the more severe the injuries the more probable it is that to cause them would require greater force that mere "rough handling".

12.2 That if infants could be caused injuries which could be fatal by mere rough, or less than rough, handling then hospitals could be full of injured children. Common experience is that this is not what in fact happens. This is all the more a statement of good sense when one looks at the nature of the injuries that make up the triad.

12.3 That very serious or even fatal injuries could sometimes be caused by either little force or by an infant falling a short distance. However, it went on to add, significantly, that such cases would "… be very rare".

12.4 That due to physiological makeup, the younger an infant or child is, the more vulnerable to injury it will be, but age is not necessary a factor in deciding the degree of force used.

13. The most difficult cases are those where there is no evidence of abuse other than what can be inferred from the presence of the triad of injuries. In such cases the Court has to be satisfied that the triad of injuries alone could provide evidence to the criminal standard that they were caused by unlawful force. In approaching this question the Court concluded that the degree of force required to cause the triad will in most cases "… be more than just rough handling …". It also recognized as "… at least possible …" that such injuries could be caused by little force, though these would be rare or very rare occurrences.

14. In summary, the Court of Appeal concluded:

14.1 The presence of the triad of injuries is consistent with unlawful application of force (i.e. Shaken Baby Syndrome). The question for the Court, however, was whether it was not just consistent, but actually diagnostic, in all cases of SBS.

14.2 In cases where the triad alone is present, that is, in the absence of any other supporting evidence such as bruising, broken ribs or a history of abuse, the triad alone "… cannot automatically or necessarily …" lead to a conclusion that the infant has been shaken.

14.3 However, the triad remains "… a strong pointer …" to Shaken Baby Syndrome.

14.4 As to the degree of force necessary to inflict the triad: the triad requires the application of some trauma and in the vast majority of cases more than rough handling will be needed. However, in rare, or very rare, cases such injuries could be caused by little force.

14.5 In its conclusions it stressed that the appeals it had considered "… demonstrate that cases of alleged NAHI are fact-specific and will be determined on their individual facts.

Reference: Addendum, PFP033302, at pp. 8-10

880. These conclusions likely represent the most cogent and authoritative synopsis of the current state of the science in this area from a medico-legal perspective.

881. As has already been pointed out, a further subset of cases properly considered within this category of non-accidental head injury are those cases involving the possibility of a short distance fall. The issue can be stated succinctly: where an infant or a child has died of a head injury, is a claim that the injury was sustained in a short fall a credible claim? This subject was addressed specifically in Pediatric Forensic Pathology: Limits and Controversies which states as follows:

> The height from which children could fall to sustain a fatal or serious head injury is a question that lacks a single, easy answer, despite Helfer (1977) having raised it as long ago as 1977. Discussion of and research into the issue has gathered some pace since about 1990. Today it remains a matter of controversy.
>
> **Reference:** Cordner, "Pediatric Forensic Pathology", PFP301639, at p. 40

882. To place this issue in context in the growing body of knowledge in pediatric forensic pathology, it is pertinent to note that consideration of this question commenced in the mid-1970's, effectively at the same time as the diagnosis of SBS crystallized.

> **Reference:** Cordner, "Pediatric Forensic Pathology", PFP301639, at p. 40

883. As noted in the publication Pediatric Forensic Pathology: Limits and Controversies, the initial study was reported by Helfer et al in the journal Pediatrics in 1977. In that article the authors reported on a series of 246 children under five years of age who fell out of bed or off a sofa, a distance of 0.9 metres. The review of results revealed no occurrences of serious injury. In most cases, any injuries were of a trivial nature. Three children had identifiable skull fracture, but none had resultant serious central nervous system sequelae. The authors concluded as follows:

> The physician should be extremely suspicious of child abuse if he/she examines a child with serious head injury, with or without skull fracture, when the cause of the injury is reported to be a fall from a bed, sofa, or crib.
>
> **Reference:** Helfer et al, Injuries resulting when small children fall out of bed. PFP301867 at p. 3
> Cordner, "Pediatric Forensic Pathology", PFP301639, at p. 54
> Evidence of Dr. Whitwell, 13/12/2007, at p. 207, line 1 to p. 208, line 10

884. Another significant study was the article authored by Barlow et al. published in the Journal of Pediatric Surgery in 1983 entitled "Ten years of experience with falls from a height in children". That article reported on 61 children admitted to hospital over a ten year period after falling one or more storeys. Of the children who fell three storeys or less, all (100%) survived.

> **Reference:** Barlow et al. Ten years of experience with falls from a height in children, PFP301838

Evidence of Dr. Whitwell, 13/12/2007, at p. 208, line 11 to p. 209, line 22

885. The initial study reporting on falls down stairways was contained in an article authored by Joffe and Ludwig and published in the journal Pediatrics in 1988. That study documented 363 cases of falls down stairs seen in the pediatric emergency department at the Children's Hospital of Philadelphia. The majority of the children had minor superficial injuries. No child had life threatening injuries and no child required intensive care. Head and neck injuries occurred in 73% of the children, but, as reported:

> There was a striking absence of serious injuries in this sample of 363 patients. There were no intracranial haemorrhages or cerebral contusions. Skull fractures occasionally occurred in younger patients, but these patients did well without neurosurgical intervention.
>
> **Reference:** Joffe and Ludwig. Stairway injuries in children, PFP301870, at p. 3
> Evidence of Dr. Whitwell, 13/12/2007, at p. 210, line 3 to p. 212, line 11

886. Interestingly, contrary to the experience reported by Barlow et al in 1983 to the effect that free falls of greater distances were associated with greater severity of injury, the authors stated as follows:

> We found no correlation between severity of injury and number of steps fallen down, and stairway injuries were much less severe than free falls of the same total vertical distance.
>
> **Reference:** Joffe and Ludwig. Stairway injuries in children, PFP301870, at p. 4

887. The abstract of the article summarizes the content as follows:

> When multiple, severe, trunkal or proximal extremity injuries are noted in a patient who reportedly fell down stairs, a different mechanism of injury should be suspected.
>
> **Reference:** Joffe and Ludwig. Stairway injuries in children, PFP301870, at p. 4
> Evidence of Dr. Whitwell, 13/12/2007, at p. 210, line 3 to p. 212, line 11

888. As noted in Pediatric Forensic Pathology: Limits and Controversies, Chadwick et al reported in 1991 on a record review of 317 children brought to the Trauma Centre at Children's Hospital – San Diego with a history from the caretaker that the child had fallen. The authors reported on the

study in an article "Deaths from falls in children: how far is fatal?" published in the Journal of Trauma in 1991. The authors reported that seven deaths occurred in 100 children who fell four feet or less, and one death occurred in 117 children who fell 10 feet to 45 feet. When examined closely, the authors concluded that the seven children who died in short falls all had other factors in their cases which suggested false histories. The study concludes:

> When children incur fatal injuries in falls of less than 4 feet, the history is incorrect.
>
> **Reference:** Chadwick et al. Deaths from falls in children: how far is fatal?, PFP301852
> Cordner, "Pediatric Forensic Pathology", PFP301639, at p. 54
> Evidence of Dr. Whitwell, 13/12/2007, p. 212, line 12 to p. 213, line 10

889. In her evidence, Dr. Whitwell confirmed that the debate concerning whether short falls can cause fatal head injury has also "picked up steam in recent years".

> **Reference:** Evidence of Dr. Whitwell, 13/12/2007, p. 205, line 13 to p. 206, line 12

890. Pediatric Forensic Pathology: Limits and Controversies identifies the most recent review in this area to be that authored by Oehmichen et al in 2005 which "aims to shed light on discriminating between the injury patterns caused by falls and those caused by abuse, shaking in particular." The conclusion expressed is that:

> As a basic principle, simple injuries are caused by simple mechanisms like falls, whereas life-threatening injuries should be attributed to abuse until proven otherwise.
>
> **Reference:** Oehmichen et al. Fall or shaken: traumatic pain injury in children caused by falls or abuse at home – a review on biomechanics and diagnosis, PFP304442
> Cordner, "Pediatric Forensic Pathology", PFP301639, at p. 43

891. The current status of this ongoing debate as it exists in 2007 in light of additional research and biomechanical studies, in contrast to certain of the earlier research reported in the 1980's and 1990's, is summarized in Pediatric Forensic Pathology: Limits and Controversies as follows:

> Overall the issue of whether short falls causes significant head injury leading to death remains contentious. Large population studies of childhood injuries on the whole indicate the likelihood of

severe head injury is rare. This is contrasted by the anecdotal individual case reports that suggest it does occur.

Reference: Cordner, "Pediatric Forensic Pathology", PFP301639, at p. 58

892. This reflection of the current state of the developing research is germane to a fair and impartial perspective on the cases that follow.

9.02 AMBER

9.02(1) The History and Circumstances

893. The history as understood by Dr. Smith at the time of the post mortem examination was that Amber, 16 months of age at the time, was being cared for by her twelve year old babysitter when she was reported to have fallen down up to five carpeted stairs in her home in Timmins on July 28, 1988.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 39, lines 10 to 24
Evidence of Dr. Whitwell, 12/12/2007, p. 36
Final Autopsy Report, PFP000012
Medico-Legal Report of Dr. Whitwell, PFP300000, at p. 3

894. A diagram of the stairway in question illustrates the length of the approximate fall as being 155 centimetres. The total height of the five stairs is 105 centimetres. At the base of the stairs was a cushioned floor.

Reference: Evidence of Dr. Whitwell, 12/12/2007, p. 37, lines 9 to 15
Evidence of Dr. Whitwell, 13/12/2007, p. 217, lines 11 to 23
Medico-Legal Report of Dr. Whitwell, PFP300000, at p. 4
Plan, PFP000196, at p. 28

895. Amber was seen initially at St. Mary's Hospital in Timmins where she was diagnosed as suffering from left subdural haematoma and cerebral contusion. Bilateral burr holes were performed. Her condition continued to deteriorate and she was transferred to HSC.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 39
Evidence of Dr. Whitwell, 12/12/2007, p. 37, line 16 to p. 38, line 4
Final Autopsy Report, PFP000012
Medico-Legal Report of Dr. Whitwell, PFP300000, at p. 4

896. On admission to HSC, Amber demonstrated papilloedema and bilateral retinal haemorrhages. CT scan showed a left parieto-occipital subdural haemorrhage which was operated on by Dr. Drake. Her condition continued to deteriorate and she was pronounced dead at 11:10 a.m. on July 30, 1988.

Reference: Dr. Smith's Written Evidence, PFP 303346, at p. 39
Evidence of Dr. Whitwell, 12/12/2007, p. 38, lines 4 to 17
HSC Records, PFP124372, at pp. 10, 12 and 18
Medico-Legal Report of Dr. Whitwell, PFP300000, at p. 4

9.02(2) The Decision to Require an Autopsy

897. Dr. Smith's initial involvement in this case arose following Amber's death on July 30, 1988 as a result of an issue raised by a health records librarian at HSC as to whether or not an autopsy was to be performed. The Coroner, Dr. Ouchterlony, had not ordered an autopsy, but the Death Certificate that he had completed indicated that an autopsy was to be performed. Complicating the issue was the fact that the family had not signed a consent to an autopsy. Dr. Smith contacted Dr. Ouchterlony in an attempt to clarify the issue. Dr. Ouchterlony advised that he did not consider an autopsy to be warranted, and by agreement with him Dr. Smith changed the Death Certificate accordingly.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 39
HSC Records, PFP124372, at p. 21

898. Some days later, Dr. Smith participated in a meeting with the clinicians who had been involved in Amber's care at HSC, specifically Dr. Barker and Dr. Driver, as well as members of the SCAN team, at which time the Amber case was discussed. There was concern expressed that Amber's injuries were out of proportion to the fall described and there was general agreement that an autopsy should have taken place. It was agreed that these concerns would be communicated to Dr. Young, then the Deputy Chief Coroner. This was done, as a result of which Dr. Young set in motion the process for exhumation of Amber's body to permit an autopsy to take place.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 39
Handwritten notes, PFP153073

899. The decision to press for an autopsy to be performed was supported by Dr. Whitwell. In her view, "there was adequate information after the child died to indicate that a further investigation including autopsy should have occurred", and the Coroner's failure to order an autopsy be carried out immediately was inappropriate.

Reference: Evidence of Dr. Whitwell, 13/12/2007, p. 239, lines 2 to 7
Medico-Legal Report of Dr. Whitwell, PFP300000, at p. 6

9.02(3) The Post Mortem Examination

900. Dr. Smith carried out a post mortem examination on Amber's body on August 19, 1988 following exhumation. At this time Dr. Smith was aware, both as a result of the meeting that preceded the request for an exhumation to enable an autopsy to be performed, and as a result of having reviewed the hospital records relating to Amber's admission to HSC, that various clinicians who had examined Amber prior to her death doubted that her injuries were the result of a fall as reported. These physicians included Dr. Keeley, a specialist working in the Intensive Care Unit; Dr. Driver, a paediatrician working with the SCAN team; Dr. Barker, the Director of the Critical Care Unit; and Dr. Chuang, a paediatric neuroradiologist.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 39
Death Report of Dr. Keeley, PFP122621
Dr. Driver's Report of Consultation, PFP122643
Letter from Dr. Barker to Mr. Newport, PFP153087
Radiology Report of Dr. Chuang, PFP122646
Radiology Report of Dr. Chuang, PFP122647

901. In her Autopsy Report Review Form Dr. Whitwell confirmed that the external examination, description of the external and internal features of the injuries, and matching of the injuries with the histology, were appropriate.

Reference: Report of the Post Mortem Examination, PFP000286
Autopsy Report Review Form, PFP000010, at p. 1

902. In her Medico-Legal Report, Dr. Whitwell noted an apparent discrepancy between the autopsy report and the photographs. In particular, she noted that the photographs appear to show a bruise over the central upper back and a questionable area of reddening/bruising over the right frontal region which were not described in the report. To the contrary, the matter of bruising was canvassed extensively by the witnesses on the trial of S.M., and the possible bruising questioned by Dr. Whitwell was not borne out in the evidence nor in the Reasons for Judgment of His Honour Judge Dunn.

Reference: Evidence of Dr. Whitwell, 13/12/2007, p. 43, lines 1 to 13
Medico-Legal Report of Dr. Whitwell, PFP300000, at p. 6
Reasons for Judgment, PFP000118, at pp. 42 and 58

903. The histological findings of the neuropathologist, Dr. George Davidson, were contained in a separate report dated October 5, 1988. These findings were incorporated in Dr. Smith's Report of Post Mortem Examination dated November 28, 1988. The summary of abnormal findings set out in that Report was as follows:

1. Head injury, with
    - 1.1 Subdural hemorrhage
    - 1.2 Retinal hemorrhages, bilateral
    - 1.3 Optic nerve hemorrhage
    - 1.4 Cerebral edema
    - 1.5 Transtentorial herniation
    - 1.6 Transcalvarial herniation, with
        - 1.6.1 Cortical petechial hemorrhages, multiple
    - 1.7 Tonsillar herniation
    - 1.8 Hypoxic-ischemic encephalopathy, severe, acute, with
        - 1.8.1 Neuronal eosinophilia, severe, cerebrum and brainstem
    - 1.9 Status post evacuation of subdural hemorrhages

Dr. Smith certified the cause of death as head injury.

Reference: Central Nervous System Report, PFP000013, at p. 1
Report of Post Mortem Examination, PFP000286, at p. 4

9.02(4) Dr. Smith's Opinion

904. Based on the findings at the post mortem examination, Dr. Smith's opinion was that the mechanism leading to Amber's head injury was shaking. In his view, the nature of Amber's injuries, including particularly the bilateral retinal haemorrhages and the optic nerve haemorrhages, the overall seriousness of the injuries and the otherwise largely negative findings on the autopsy, were inconsistent with a fall down household stairs.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 40

905. In particular, as Dr. Whitwell acknowledged in her evidence at the Commission, the findings with which Dr. Smith was confronted were the triad, namely, subdural haemorrhage, bilateral retinal haemorrhages, and cerebral oedema, which then and even in 2005 may be considered as a pointer to shaking.

Reference: Evidence of Dr. Whitwell, 13/12/2007, p. 222, line 15 to p. 223, line 15

906. This conclusion was reinforced as far as Dr. Smith was concerned in view of the fact that the stairway consisted of only five steps which were carpeted. Dr. Smith was not aware at the time of any stairway fall, and certainly not a fall of only slightly more than one metre down five carpeted steps, resulting in such devastating injuries. On the other hand, in his opinion, the injuries could be explained by shaking, with or without a fall as described. Based on the evolution of the science in this area, this was a reasonable conclusion both in 1988 and, arguably, today.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 40

9.02(5) The Trial

907. Dr. Smith's next principal involvement was as a witness at the trial of S.M., Amber's babysitter. S.M. had been charged with manslaughter. As a minor, she was tried in Youth Court presided over by The Honourable Mr. Justice Patrick Dunn.

Reference: Trial Transcript, PFP121972

908. Dr. Smith was called as a witness on behalf of the prosecution. In summary, Dr. Smith testified that he could not accept that Amber's injuries resulted from a fall down the stairway in question. He also testified that he did not find evidence of other injuries, such as might result from blunt impact trauma, to explain the head injury. To the contrary, he expressed the opinion that the mechanism leading to the injuries was shaking without blunt impact trauma. This opinion took into account the views of the clinicians, including Amber's initial management in Timmins and by Dr. Drake at HSC. He emphasized that in his view the optic nerve haemorrhages were particularly significant and were influential in causing him to conclude that the injuries were the result of shaking rather than a fall down five carpeted stairs.

Reference: Evidence of Dr. Smith at Trial, PFP121972, at p. 96-99
Evidence of Dr. Smith at Trial, PFP122185, at p. 127-129
Dr. Smith's Written Evidence, PFP303346, at p. 41

909. Dr. Smith was aware that Drs. Driver, Barker and Chuang were also called as witnesses on behalf of the prosecution. He was not present for their testimony, and he was not aware of the details of their evidence. However, he understood that each of them testified consistent with their impressions at the time of Amber's admission to HSC, that is, that they considered the injuries they observed to far more serious than those to be expected from the relatively minor fall described to them. In addition, he believed that Dr. Driver in particular testified that she believed that shaking was the likely cause of the injuries.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 41

910. In fact, Dr. Driver testified in a categorical manner that there was no way that the fall described by S.M. could have caused the injuries to Amber. On the other hand, the injuries were compatible with what she would have expected to see in a child who had been violently shaken.

Dr. Driver explained in her evidence at the Commission that based on her experience, her attendances at conferences and her review of the literature, short falls do not usually result in fatal injuries.

> **Reference:** Evidence at Trial of Dr. Driver, PFP122356, at pp. 80-81
> Evidence at Trial of Dr. Driver, PFP122356, at pp. 30, 31, 39 and 40
> Evidence of Dr. Driver, 09/01/2008, p. 176, line 8 to p. 177, line 2

911. It is significant that the responsible Crown Attorney, Terri Regimbal, did her own independent research concerning the major issue in the trial and confirmed that "at the time … the general dominant theme of all the literature was that small falls don't kill."

> **Reference:** Evidence of Terri Regimbal, 21/01/2008, p. 120, lines 16 to 18 and p. 145, lines 13 to 15

912. In her evidence at the Commission Dr. Whitwell allowed that the literature has "moved on" from the time of the post mortem examination and the trial in the Amber case. Dr. Whitwell stated:

> Well, in the late '80s, early '90s, going back to the literature, it was thought that in these cases, there was severe brain damage. And that damage could not be caused by a low level fall.
>
> **Reference:** Evidence of Dr. Whitwell, 12/12/2007, p. 54, lines 19 to 23

913. Dr. Whitwell made it clear in her report and in her evidence that she viewed Amber's injuries to be the result of the fall described by the babysitter. Viewed in 2007 and 2008, having regard to the additional knowledge that short falls can result in fatal consequences, Dr. Smith agrees that this is a reasonable opinion at this time in these circumstances. With the benefit of hindsight, Dr. Smith acknowledges that he was overly categorical in his opinion and in his evidence at the time of the post mortem examination and the trial in this matter. Dr. Smith was of the opinion that the constellation of Amber's injuries pointed to shaking rather than a short fall. Dr. Smith believed that this was a reasonable opinion at the time, and continues to believe that it would be an opinion shared by a significant proportion of responsible experts even at this time. At the same time, he now concedes that one could not definitively exclude other causes, such as the fall, which is essentially what he did

in his evidence at the trial of this matter. Certainly, at this time, Dr. Smith acknowledges that an opinion that shaking was the cause would have to allow for the significant possibility that the injuries resulted from a fall.

Reference: Evidence of Dr. Whitwell, 12/12/2007, p. 46, line 10
Medico-Legal Report of Dr. Whitwell, PFP300000, at p. 8
Dr. Smith's Written Evidence, PFP303346, at p. 43
Evidence of Dr. Smith, 28/01/2008, p. 21, line 21 to p. 122, line 5

914. Furthermore, Dr. Smith now recognizes and accepts that the references made in the course of his testimony to his own personal experiences were inappropriate. Similarly his testimony regarding the usual circumstances associated with a typical whiplash shaken infant syndrome should not have been offered. At the same time, Dr. Smith points out that his discussion of the typical circumstances in which SBS happens was in response to questions from the trial judge.

Reference: Evidence of Dr. Smith at Trial, PFP121972, at p. 101-2
Evidence of Dr. Smith at Trial, PFP121972, at p. 107-111
Dr. Smith's Written Evidence, PFP303346, at p. 43-4
Evidence of Terri Regimbal, 21/01/2008, p. 117, line 5 to p. 119, line 10

9.02(6) Communications with Mr. Justice Dunn

915. Dr. Smith's evidence was extremely lengthy, lasting several days. It was incomplete on a Friday afternoon with the result that he flew home to Toronto that day and returned to Timmins on Sunday to resume testifying on the following Monday. When Dr. Smith boarded the plane in Timmins to fly to Toronto, he was surprised to find that he was seated next to Justice Dunn. Justice Dunn was very friendly and congenial which took Dr. Smith aback in that he was the presiding judge in the trial and, simply stated, Dr. Smith had never had such an experience previously.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 41
Affidavit of Justice Dunn, PFP302594

916. Justice Dunn appeared quite happy to engage in conversation with Dr. Smith. Dr. Smith recalls part of their discussion relating to the case involving Susan Nelles which had taken place shortly after Dr. Smith joined the staff at HSC. Justice Dunn also adverted to the witnesses from HSC who had testified to that point in the trial of S.M. generally and left Dr. Smith with the impression that he viewed HSC and the physicians practising there very favourably. Justice Dunn happened to also be on the same plane returning to Timmins on the following Sunday afternoon, although he and Dr. Smith were not seated side by side on this occasion, and they simply exchanged pleasantries at the airport.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 41
Affidavit of Justice Dunn, PFP302594

917. Dr. Smith admits that he read into the positive comments made by Justice Dunn concerning the witnesses from HSC the conclusion that Justice Dunn thought that S.M. was responsible for shaking Amber without that being said. Specifically, Justice Dunn did not say that he believed S.M. to be guilty. In retrospect, Dr. Smith recognizes and concedes that he misinterpreted what Justice Dunn meant. Also, Dr. Smith recognizes that these comments were made prior to the Judge have heard any of the evidence called on behalf of the defence.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 123, line 19 to p. 124, line 24
Dr. Smith's Written Evidence, PFP303346, at p. 41
Affidavit of Justice Dunn, PFP302594

918. Dr. Smith was sporadically aware of certain of the evidence called on behalf of the defence over the ensuing months. This came about since the Crown Attorney responsible for the case contacted Dr. Smith from time to time to advise of opinions adduced from various defence experts, and asked if Dr. Smith could provide comment. Dr. Smith does not have specific recall of those conversations at this time although he can say he was made aware that a number of experts were testifying to the effect that Amber's injuries could result from a stairway fall, and need not result

from shaking. When Justice Dunn handed down his decision in July, 1991 acquitting S.M., Dr. Smith became aware of the result, but exactly when and how he is not able to recall. He does not recall seeing a copy of the Reasons for Judgment at the time, and does not recall reading it at that time. It should be pointed out that this decision was delivered some three years after Amber's death and approximately 18 months after Dr. Smith had testified at the trial.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 41

919. Dr. Smith does recall attending a special meeting of the SCAN Team in January 1992 at which the Judgment was discussed. Dr. Smith cannot say whether he had read the Judgment prior to that time. If he had not read it by that time he had reviewed it within a period of months thereafter in conjunction with his response to the complaint to the CPSO. Dr. Smith accepts that, based on the evidence heard, there was ample basis for a conclusion that Amber's injuries could result from a fall rather than shaking. However, Dr. Smith does not agree with all of Justice Dunn's observations concerning the sixteen problems he noted with regard to HSC's inquiry in this case. As examples, Dr. Smith did believe that he considered the bruises on Amber and felt that they did not support a fatal fall. It was and remains his understanding that shaking can result in a unilateral subdural haemorrhage. Also, regarding the criticisms made concerning the lack of detail in Dr. Smith's post mortem report, it was completed in the standard form as required by OCCO at the time. His obligation, as far as the post mortem report was concerned, was to state his opinion regarding *cause of death*, which was, and remains, head injury. His opinion as to the *mechanism* of death (shaking) was not in doubt and had been communicated to the Crown and to the authorities in 1988.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 41-2
Reasons for Judgment, PFP000118

920. Many years later Dr. Smith encountered Justice Dunn at a conference in which Dr. Smith was involved. Dr. Smith believes that it was a meeting of Family Court Judges in Toronto in January, 1998. Dr. Smith recalls a very casual discussion regarding the case involving S.M. at that time. He recalls discussing one of the experts called on behalf of the defence, the discussion focusing on the hospital where that doctor had privileges at the time. Dr. Smith also made passing reference to the literature concerning head injury pathology which had been published since the time of the trial, and suggested that the evidence might be different if the case were tried in the late 1990's. At the time, Dr. Smith believed that Justice Dunn's apparent acknowledgement in this regard was an acknowledgement that if the case were tried in the late 1990's, Justice Dunn would have accepted the evidence of the HSC witnesses. With the benefit of hindsight, Dr. Smith allows that it is equally possible that Justice Dunn was simply being polite, or was implicitly stating that perhaps the evidence of Dr. Smith and his colleagues would have been different with the passage of time. In any event, Justice Dunn did not state at that time that he believed S.M. to be guilty or to have changed his opinion with respect to Dr. Smith's evidence or the evidence of the other HSC physicians.

Reference: Evidence of Dr. Smith, 28/01/2008, P. 125, lines 2 to 25
Dr. Smith's Written Evidence, PFP303346, at p. 42
Affidavit of Justice Dunn, PFP302594

9.02(7) The CPSO Proceedings

921. Following the dismissal of the charge against S.M., S.M.'s father launched a complaint concerning Dr. Smith to the CPSO. Dr. Smith responded to that complaint in 1992. Dr. Smith addressed the substance of the complaint on the merits. He also raised the question of the propriety of the CPSO investigating a complaint concerning his conduct in carrying out duties arising at the instance of OCCO.

Reference: Dr. Smith's Written Evidence, PFP303346, p. 42
Letter from D.M. to Mr. Newport, PFP153124
Letter from Dr. Smith to Mr. Newport, PFP147101

922. As part of his response on the merits, Dr. Smith referenced his discussion with Justice Dunn during the course of the trial. Specifically, he stated that Justice Dunn had "repeatedly indicated to me that he believed Shelley to be guilty, and that he believed the opinions provided by Drs. Barker, Driver and me." As addressed earlier, these statements were not made. Dr. Smith concedes that he misinterpreted Justice Dunn's comments and in attributing the statement to Justice Dunn that he believed S.M. to be guilty, this was simply incorrect. Parenthetically, Dr. Smith similarly and incorrectly communicated this misinterpretation of Justice Dunn's comments to persons in OCCO and to the media.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 23, line 19 to p. 125, line 25
Dr. Smith's Written Evidence, PFP303346, at p. 42

923. The issue concerning the jurisdiction of the CPSO to consider a complaint against a pathologist acting under the authority of a coroner's warrant was also contested by Dr. Young, by that time the Chief Coroner of Ontario. The Complaints Committee of the CPSO decided in May, 1998 that it did not have jurisdiction in the matter. This decision was appealed by the complainant to the Health Professions Appeal and Review Board which, in a decision rendered in September, 2000, determined that the CPSO did have jurisdiction to consider the complaint.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 42
Letter from Dr. Young to Mrs. Mann, PFP000106
CPSO Decision and Reasons, PFP056603
Letter from D.M. to HPARB, PFP056608
HPARB Decision and Reasons, PFP000085

924. Following the decision of the Health Professions Appeal and Review Board, S.M.'s father submitted a further detailed complaint to the CPSO on November 26, 2000 setting out numerous bases on which he alleged that Dr. Smith had failed to maintain the standard of practice and behaved

in an unprofessional manner in his conduct of the post mortem examination and in his testimony as a witness called by the prosecution. Dr. Smith responded to the complaint.

> **Reference:** Dr. Smith's Written Evidence, PFP303346, at p. 42-43
> Letter from D.M. to Mrs. Doris, PFP028937
> Letter from Dr. Smith to Mrs. Doris, PFP146324

925. The Complaints Committee engaged a three-member independent panel of experts to provide assistance in arriving at a decision concerning the complaint. The panel was made up of two forensic pathologists and one paediatric pathologist. The Committee released its decision on October 15, 2002. The Complaints Committee endorsed the expert panel's conclusion "that Dr. Smith's overall approach was acceptable". However, the Committee went on to note that it was extremely disturbed by the deficiencies in Dr. Smith's approach in this case, which fell into two categories: first, that Dr. Smith's work was not as thorough as it should have been, and second, that Dr. Smith was overly dogmatic in stating his conclusions where doubt existed.

> **Reference:** Dr. Smith's Written Evidence, PFP303346, at p. 43
> Letter from Dr. Cohle to Mrs. Doris, PFP145095
> Letter from Dr. Smith to Mrs. Doris, PFP145084
> CPSO Decision and Reasons, PFP014511

926. In its decision, the Committee indicated its agreement with the independent panel's statement expressed as follows:

> His opinion that the cause of death was head injury was acceptable. By today's standards he was overly dogmatic in court in stating that shaking was the only cause for the head injuries. He was generally correct in his statements that the history given was inadequate to explain the fatal head injuries. Using the standards of the late 1980's and early 1990's, Dr. Smith's conclusion that the head injuries were brought about by shaking was generally acceptable. Indeed, there are paediatricians with expertise in child abuse who have opined that children larger than Amber have been fatally shaken. By today's standards, it would be more acceptable to say that Amber died of inflicted head injury, either by shaking or by blunt force.

The Complaints Committee declined to refer the matter on to the Discipline Committee. An appeal by the complainant to the HPARB was heard and dismissed. The Complaints Committee required Dr. Smith to attend before a panel of the Committee to be cautioned, which he did.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 43
Caution in Person Administered, PFP146392
Evaluation, PFP146393
Evaluation, PFP146394
Evaluation, PFP146395
Evaluation, PFP146396

9.03 DUSTIN

9.03(1) The History and Circumstances

927. This was a consultation in respect of a post mortem examination conducted by Dr. Sukrita Nag, a pathologist at Kingston General Hospital. Dr. Smith's first involvement with Dustin came when he was contacted by Dr. Bechard, the Regional Supervising Coroner. Dr. Smith believes he spoke with Dr. Bechard over the telephone. Dr. Bechard requested that Dr. Smith review the findings of Dr. Nag. Dr. Smith recalls that Dr. Bechard advised him that he believed that Dr. Nag may have missed something during the original examination. Dr. Smith does not recall learning at that time why Dr. Bechard was skeptical about Dr. Nag's original post mortem examination.

Reference: Dr. Smith's Written Evidence, PFP303346, p. 51

928. Dr. Smith's understanding of the history was that Dustin's father had taken the infant, who was 2 months and 9 days of age, for a walk in a stroller on the morning of November 17, 1992. When stopped by a friend who wanted to see the baby, the father removed the blanket from Dustin's face which was white, the baby was not breathing and red, mucousy foam was coming out of the baby's nose. The infant was taken to Belleville General Hospital. On admission his condition was noted to be very poor with fixed, dilated pupils and no spontaneous respiration, however, he was able to be resuscitated.

Reference: Letter from Dr. Padfield, PFP002253

929. The infant was subsequently transferred to Hotel Dieu Hospital in Kingston where death was pronounced on November 18, 1992. The autopsy was carried out at Kingston General Hospital. Dr. Smith recalls that at the time of his review, he had available to him Dustin's medical records from both Belleville General Hospital and Hotel Dieu Hospital. Dr. Smith also received Dustin's tissue specimens, microscopy, Dr. Nag's Post Mortem Examination Report, photographs and radiographs in order to render a second opinion.

Reference: Discharge Summary of Dr. Patel, PFP002268
Emergency Record Belleville Hospital, PFP002286
Radiology Report Belleville Hospital, PFP002270
Case Summary of Dr. Padfield, PFP080056
Progress Notes Hotel Dieu Hospital, PFP002335
Discharge Summary of Dr. Lau, PFP048514
Progress Notes Hotel Dieu Hospital, PFP048458
Radiology Report of Dr. Pearse, PFP002364
Radiology Report of Dr. Pearse, PFP002365
EEG Report of Dr. Brunet, PFP002367
Mortality Data Sheet, PFP002319
Report of Post Mortem Examination, PFP001982

930. Dr. Smith was aware that there were physicians at both Belleville General Hospital and Hotel Dieu who queried shaken baby syndrome. He believes he learned this from Dr. Bechard. Specifically, Dr. Smith was aware of the reports of Dr. Pearse, a radiologist at Hotel Dieu Hospital, who reviewed the CT scan of Dustin's head and reported right subdural haematoma with widespread cerebral edema which he described as "a classical radiographic picture of a 'shaken baby'". He was also aware of the reports of Dr. Padfield, a paediatrician at Hotel Dieu Hospital, who concluded:

> "Because of the absence of any obvious history of any injury, together with the neurological / ophthalmological findings, including massive bilateral retinal haemorrhages and a right subdural haematoma, the presumptive diagnosis must be 'death due to shaken baby syndrome'".

In her Medico-Legal Report, Dr. Whitwell agreed that there was sufficient information available to indicate that this was a possible child abuse case.

Reference: Dr. Smith's Written Evidence, PFP303346, p. 51
Reports of Dr. Pearse, PFP002365 and PFP002011

Discharge Letter of Dr. Padfield, PFP002253
Medico-Legal Report of Dr. Whitwell, PFP136005, at p. 5

931. The Report of Post Mortem Examination carried out by Dr. Nag was dated December 22, 1992. There were no external marks of violence noted. Regarding the head, Dr. Nag reported "acute subdural haematoma right subdural space". Regarding the brain, "mild cerebral oedema" was noted. As far as X-ray findings were concerned, the Report stated:

> "OP 77 – whole body X-ray and head – minor depression in right frontal bone – otherwise unremarkable."

Under her Summary of Abnormal Findings, Dr. Nag stated, *inter alia*, "Retina: haemorrhages". The Cause of Death was certified as follows:

> "1. Respiratory failure secondary to (a) bronchopneumonia; (b) aspiration
> 2. Massive subdural haematoma"

Reference: Report of Post Mortem Examination, PFP001982

9.03(2) The Consultation Report

932. In his consultation report entitled Report of Pathology Review, Dr. Smith commented specifically on two laser-based photographs taken during the brain extraction at the post mortem examination. Regarding these photographs, Dr. Smith stated as follows:

> "The internal photographs revealed a right-sided subdural haemorrhage over-lying the right cerebral convexity. There was marked gyral flattening and sulcal narrowing, indicative of significant cerebral oedema. Although it was not well displayed, there was some haemorrhage over the left cerebral convexities. Whether this represented subdural or subarachnoid haemorrhage could not be discerned."

Reference: Report of Pathology Review, PFP002249, at p. 2

933. Dr. Smith had also been provided with specimen jars containing the posterior globes and portions of the optic nerves of the left and right eyes. Regarding these specimens, he noted the following:

> "The left and right eye specimens were of similar appearance. They consisted of the posterior half of the globe, along with a segment of optic nerve, approximately 8 mm in length. The nerves were encircled by a sheath of dark red haemorrhage. The retinal tissues were dark reddish-black in colour and were detached from the sclera."

Reference: Report of Pathology Review, PFP002249, at p. 2

934. Dr. Smith also carried out a microscopic examination of various specimens, including the eyes. Based on this examination he recorded the following observations:

> "The specimens of eye and optic nerve demonstrated bilateral involvement by acute haemorrhage. The optic nerve heads bore a thick layer of subdural haemorrhage, which was maximal immediately adjacent to the dural attachment to the sclera. Intradural haemorrhage was also apparent. On the left side, a small portion of extradural tissue was included; this showed extradural haemorrhage. The retinae bore many foci of acute haemorrhage involving all levels of the retinal tissues, as well as subretinal haemorrhage. There was no healing response to the haemorrhage and no iron was present."

Reference: Report of Pathology Review, PFP002249, at p. 2

935. Having regard to his review and examinations, Dr. Smith reported his conclusions as follows:

> "**Summary of Abnormal Findings**:
>
> 1. (Blunt head injury) with
>   - 1.1 Subdural haemorrhage
>   - 1.2 Cerebral oedema
>   - 1.3 Optic nerve haemorrhage
>   - 1.4 Retinal haemorrhage
> 2. (Status post resuscitation), with
>   - 2.1 Acute bronchopneumonia
>   - 2.2 Aspiration of foreign material
>   - 2.3 Stress effect of thymus
>
> **Comment**:
>
> The findings of intracranial haemorrhage, cerebral oedema and retinal/optic nerve haemorrhages in the absence of soft tissue injury, is pathognomonic of shaken baby syndrome. The medical literature indicates that such a pattern of injury may be also be caused by the direct application of blunt force, although such an interpretation is controversial. Nevertheless, the autopsy findings in this boy indicate that death resulted from blunt trauma. In the absence of a credible explanation, this injury must be regarded as non-accidental in nature."

Reference: Report of Pathology Review, PFP002249, at p. 3

9.03(3) Dr. Smith's Opinion

936. Dr. Smith was hampered by the absence of neuropathological histology, which was out of his control. However, he felt that, together with the medical records of Dustin's hospitalization, he had sufficient information to render an opinion with reasonable certainty. Dr. Smith continues to believe that his opinion regarding Dustin's death (that the post mortem examination findings were pathognomonic of shaken baby syndrome) was reasonable at the time and remains a reasonable

explanation for Dustin's death today. As explained by him in his oral evidence, he confirmed that he had evidence of the triad. He considered himself "within the mainstream of the majority of opinion" in terms of the diagnostic significance of those findings in the absence of a direct impact injury pointing to SBS. In light of his findings, he believes that his conclusion that Dustin's death was likely not accidental was also reasonable.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 120, line 6 to p. 122, line 11
Dr. Smith's Written Evidence, PFP303346, at p. 51 and at p. 53

937. Dr. Whitwell raised certain issues concerning Dr. Smith's consultation in her reports and evidence. However, she allowed that the opinion that findings of (1) subdural haemorrhages, (2) cerebral oedema and (3) optic/retinal haemorrhages was pathognomonic of shaken baby syndrome would almost certainly be the view of many other clinicians and pathologists at the time. In her evidence she agreed that this was "the conventional wisdom", and a defensible conclusion in 1992. Clearly, having regard to the state of the science, Dr. Smith's opinion regarding the findings of subdural haemorrhages and cerebral edema with optic/retinal haemorrhages being pathognomonic of SBS would be the view of many other clinicians and pathologists not only at that time, but also at the present time.

Reference: Autopsy Report Review Form, PFP001971
Medico-Legal Report of Dr. Whitwell, PFP136005, at p. 7
Evidence of Dr. Whitwell, 12/12/2007, p. 142, lines 4 to 14
Evidence of Dr. Whitwell, 13/12/2007, p. 167, lines 10 to 14
Dr. Smith's Written Evidence, PFP303346, at p. 53

938. It is apparent that Dr. Smith had additional photographs to review that Dr. Whitwell did not. Dr. Whitwell was nonetheless able to confirm on her review that the photograph of the brain *in situ*, albeit unclear, "probably shows subdural haemorrhage bilaterally although Dr. Nag describes right sided subdural haematoma only".

Reference: Medico-Legal Report of Dr. Whitwell, PFP136005, at p. 5

939. One of the issues raised by Dr. Whitwell was based on her conclusion that the references to blunt injury and blunt trauma referred to an impact injury, for which there was no evidence. Dr. Smith clarified in his evidence that the term "blunt trauma" includes indirect trauma, such as one sees with SBS.

Reference: Autopsy Report Review Form, PFP001971
Evidence of Dr. Whitwell, 12/12/2007, p. 158, lines 19 to 23
Dr. Smith's Written Evidence, PFP303346, at p. 53

940. In addition, Dr. Whitwell raised the issue of findings consistent with pneumonia and suggested that this might have been the cause of death. In his consultation report Dr. Smith was clear that in his view the head injury was the cause of death, and the pneumonia was consequent to the resuscitation. In his evidence, Dr. Smith disagreed that the symptoms consistent with SBS were caused by the resuscitation. The only finding he attributes to the resuscitation is pneumonia. Dr. Smith continues to believe that Dustin died with resuscitation-related pneumonia but that the pneumonia was not the cause of his death. Dr. Whitwell conceded in her evidence that Dustin's intracranial injuries were far more serious than any possible chronic pneumonia.

Reference: Autopsy Report Review Form, PFP001971, at p. 3
Medico-Legal Report of Dr. Whitwell, PFP136005, at p. 7
Evidence of Dr. Whitwell, 12/12/2007, p. 156, lines 3 to 13
Evidence of Dr. Whitwell, 13/12/2007, p. 169, line 2 to 7
Dr. Smith's Written Evidence, PFP303346, at p. 53

9.03(4) The Preliminary Hearing

941. Dr. Smith's evidence at the Commission was that his testimony at the preliminary hearing was reasonable. Apart from certain matters which are addressed in the next paragraph, this was the case. He attempted to describe the controversies and uncertainties in the science of the SBS diagnosis. The only certainty he was capable of knowing was that Dustin suffered a traumatic injury to his head. He believed that trauma was a shaking but could not rule out the possibility that Dustin

was hit by a blunt object. He did leave open the possibility that a credible explanation could be given – Dr. Smith had not been provided with any such explanation at the time he testified in this case.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 52-53
Dr. Smith's Preliminary Hearing Evidence, PFP048194

942. Dr. Smith accepts that he used colloquialisms that may have been inappropriately casual e.g. "shoot at it from three different ways". Dr. Smith acknowledges that his statements about Justice Dunn were inaccurate and misleading. Dr. Smith also acknowledges that he was too harsh when describing Dr. Nag's original post mortem examination – he ought to have been more scientific in his response to questions about the original post mortem examination. In addition, Dr. Smith is apologetic concerning his characterization of an expert in the Amber case. However, it should be noted that these are exceptions in a lengthy transcript. Also, it is to be noted that Justice Hunter intervened when Dr. Smith's evidence strayed beyond that which was within his area of expertise; this was the appropriate role of the Court in hearing the evidence of an expert.

Reference: Dr. Smith's Written Evidence, PFP303346, at p.52-53
Dr. Smith's Preliminary Hearing Evidence, PFP048194

9.04 GAUROV

9.04(1) The History and Circumstances

943. Dr. Smith has no specific recollection of any contact with him or information coming to him in relation to this case prior to assuming responsibility for the post mortem examination. Prior to commencing the autopsy on March 21, 1992, Dr. Smith learned some information concerning the history based on his review of the Warrant for Post Mortem Examination and the hospital records pertaining to Gaurov's admission to HSC.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 54
Warrant for Post Mortem Examination, PFP001474

944. Gaurov was 5 weeks old at the time of his death. He had been cared for by his father as his mother was recovering from surgery for a meningioma. When Gaurov was checked by his father following a feeding, he reportedly became unresponsive. Emergency services were called and on arrival found Gaurov without vital signs. He was transferred to Scarborough Centenary Hospital in the early morning hours of March 18, 1992 where he was resuscitated. He was then transferred to HSC and admitted to the ICU.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 54
Evidence of Dr. Whitwell, 12/12/2007, p. 182, line 14 to p. 184, line 8
Final Autopsy Report, PFP001489

945. On admission to HSC, an ophthalmic examination found multiple retinal haemorrhages bilaterally. A CT Scan of the head revealed acute intracranial haemorrhage. The infant's condition continued to deteriorate with the result that life support was withdrawn on March 20, 1992.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 54
Evidence of Dr. Whitwell, 12/12/2007, p. 182, line 14 to p. 184, line 8
Report of Dr. Chuang, PFP001530
Medico-Legal Report of Dr. Whitwell, PFP136013, at p. 3

946. Dr. Smith was also aware of various specific notations made by the treating doctors in the hospital records. For example, he was aware that Dr. Bohn, the Assistant Director of the Paediatric Critical Care Unit, had noted in his Morgue Death Report that the cause of death was head injury consistent with shaken baby syndrome.

Reference: Dr. Smith's Written Evidence, PFP303346, at p.54
Morgue Death Report, PFP001464
PCCU Death Report, PFP001552

947. In addition, Dr. Smith was aware of the record made by Dr. McGreal, a senior neurologist, who made note of the bilateral retinal haemorrhages and queried whether shaken baby was a possible

cause. A note in the chart by Dr. Huyer, a member of the SCAN team, also referred to the fact that the clinical picture and laboratory data suggested shaken baby syndrome.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 54
HSC Records, PFP001500, at p. 1
Medico-Legal Report of Dr. Whitwell, PFP136013, at p. 4

948. Regarding the background and circumstances, Dr. Whitwell acknowledged in her evidence at the Commission that "there was sufficient information to raise the issue of the death being suspicious". Furthermore, she also confirmed the importance of taking into account the views of the treating clinicians, including Dr. Bohn, Dr. McGreal and Dr. Huyer.

Reference: Evidence of Dr. Whitwell, 12/12/2007, p. 171, line 21 to p. 175, line 4; and p. 174, line 24 to p. 175, line 4

9.04(2) The Post Mortem Examination

949. Dr. Smith carried out the post mortem examination on March 21, 1992. His recollection is that Dr. Huyer was present at the autopsy. His findings included acute subdural haemorrhage, acute subarachnoid haemorrhage, acute bilateral retinal haemorrhages, and cerebral edema. He also found evidence of an older focal subdural haemorrhage as well as an older left parietal cephalhaematoma. There was no apparent external injury to the head.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 54
Report of Post Mortem Examination, PFP001479

950. In May, 1992, Dr. Smith received the neuropathology report from Dr. Becker. In accordance with the conventional practice this report was incorporated into Dr. Smith's Report of Post Mortem Examination which was completed on June 16, 1992. In that Report, Dr. Smith documented his prior findings of acute subdural haemorrhage, acute subarachnoid haemorrhage, acute retinal haemorrhages and cerebral edema. He also noted specifically the subdural and subarachnoid haemorrhages of both the right and left optic nerves. He characterized his principal finding to be

acute central nervous system trauma. He certified that in his opinion the cause of death was head injury.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 55
Neuropathological Report of Dr. Becker, PFP001486
Report of Post Mortem Examination, PFP001479

951. The review conducted by Dr. Whitwell did not appear to find fault with the examinations carried out by Dr. Smith as set out in the Report of Post Mortem Examination. In her initial Autopsy Report Review Form, Dr. Whitwell answered affirmatively in respect of each of the questions posed for her to answer. In her Medico-Legal Report Dr. Whitwell confirmed that there was a detailed description of the external and internal findings together with a summary of the anatomical findings. Regarding the histology, she noted that her review of the neurohistology and other histology confirmed the findings described. Regarding the Report of Post Mortem Examination itself, she characterized it as "detailed" and the summary of the findings as "reasonable".

Reference: Autopsy Report Review Form, PFP001491
Medico-Legal Report of Dr. Whitwell, PFP136013, at p. 4-5

9.04(3) Dr. Smith's Opinion

952. Dr. Smith concluded that the older subdural haemorrhage and the cephalhaematoma likely represented sequelae related to Gaurov's birth 5 weeks previously, whereas the acute injuries were the result of a separate, recent incident which necessitated the admission to HSC and which led to Gaurov's death. These acute injuries included subdural haemorrhage, retinal haemorrhages and cerebral edema which, as far as Dr. Smith was concerned, were the principal findings. These injuries comprised the triad, and in view of the fact that there was no evidence of any external traumatic injury, Dr. Smith's opinion that the likely mechanism which led to the infant's death was shaking.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 120, line 7 to 24
Dr. Smith's Written Evidence, PFP303346, at p. 55

953. In her review of this case, Dr. Whitwell acknowledged in her Autopsy Report Review Form that:

> "This case was done in 1992 when the norm/accepted opinions from most pathologists and certainly clinicians would be this was non-accidental injury with SBS (SDH, swelling, RH, i.e. the triad)."

In her evidence at the Commission, Dr. Whitwell confirmed that Dr. Smith's conclusion was reasonable at the time, and agreed that the constellation of injuries found by Dr. Smith had been characterized by the UK Court of Appeal in 2005 as a pointer to non-accidental head injury.

Reference: Autopsy Report Review Form, PFP001491, at p. 2
Evidence of Dr. Whitwell, 12/12/2007, at p. 189, lines 23 to 24
Evidence of Dr. Whitwell, 13/12/2007, at p. 171, lines 5 to 13 and p. 177, lines 19 to 23

954. Dr. Smith agrees with the evidence of Dr. Whitwell that his opinion that this death was non-accidental head injury resulting from shaken baby syndrome would be the normal and accepted opinion of most pathologists and clinicians in 1992. As Dr. Whitwell acknowledges, the "triad" of injuries found in this case, that is, the subdural haemorrhage, retinal haemorrhages, and cerebral edema, would have been viewed in 1992 as diagnostic of non-accidental head injury generally, and in the absence of any external injury, shaken baby syndrome specifically, which is how Dr. Smith viewed the case. As the evidence heard at this Commission has amply proved, there would be a significant body of both pathologists and clinicians who would continue to view this constellation of injuries as pointing to inflicted head trauma today

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 55
Autopsy Report Review Form, PFP001491
Medico-Legal Report of Dr. Whitwell, PFP136013, at p. 6

955. In her review of this case Dr. Whitwell raised the possibility of rebleeding associated with the older subdural haemorrhage contributing to the acute subdural haemorrhage noted by the

radiologist and by Dr. Smith. At the same time, Dr. Whitwell acknowledged that this theory is the product of recent research, it is a "possibility" only, it would "almost certainly have been dismissed by both pathologists and particularly clinicians" in 1992, and even today it remains "a contentious and debated issue".

Reference: Evidence of Dr. Whitwell, 12/12/2007, p. 191, lines 1 to 7, p. 193, lines 1 to 10 and p. 200, line 20 to p. 201, line 5
Evidence of Dr. Whitwell, 13/12/2007, p. 176, line 22 to p. 177, line 9
Autopsy Report Review Form, PFP001491
Medico-Legal Report of Dr. Whitwell, PFP136013, at p. 6

956. In his evidence Dr. Smith addressed the issue of the possibility of rebleeding of the older subdural haemorrhage accounting for Gaurov's injuries. Dr. Smith stated that he was unable to agree with this hypothesis. In particular, he indicated that this suggestion was not borne out on the neuropathologic examination carried out by Dr. Becker. In addition, Dr. Smith testified that he does not believe that the older haemorrhage could account for the acute haemorrhage in the subdural and subarachnoid spaces as well as the optic nerve and retinal haemorrhages. This view was supported by the evidence of Dr. Huyer who confirmed that he does not accept that the rebleed theory explains the injuries suffered by Gaurov.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 123, lines 1 to 18
Dr. Smith's Written Evidence, PFP303346, at p. 55
Evidence of Dr. Huyer, 09/01/2008, p. 255, line 19 to p. 256, line 14

9.05 KASANDRA

9.05(1) The History and Circumstances

957. Dr. Smith believes that his initial involvement in relation to this case was when he was contacted by the Coroner, Dr. Margaret Milton, on the day that death was pronounced, namely, April 11, 1991. His only recollection of that exchange was to the effect that Dr. Milton was concerned about the possibility of child abuse and was requesting that Dr. Smith carry out the post mortem examination on Kasandra.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 68
Warrant for Post Mortem Examination, PFP000366

958. Prior to commencing the autopsy on April 12, 1991, Dr. Smith learned certain additional details concerning Kasandra's prior circumstances from the Warrant for Post Mortem Examination and based on his review of the hospital records pertaining to her admission to HSC. Kasandra was 3 years and 4 months of age at the time of her death. She had previously been admitted to Peel Memorial Hospital on February 12, 1991 due to vomiting and lethargy. A CT Scan carried out at that time showed cerebral atrophy and subsequent review at the time of her later admission to HSC showed older subdural haematoma. She was noted at the time of her earlier admission to be withdrawn and had external bruises. She was discharged into the care of her father and stepmother in March, 1991.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 68
Evidence of Dr. Whitwell, 13/12/2007, at p. 55, line 5 to p. 56, line 18
Warrant for Post Mortem Examination, PFP000366
Final Autopsy Report, PFP000368

959. She was readmitted to Peel Memorial Hospital on April 9, 1991 in reported status epilepticus. She was treated with intravenous anticonvulsants but later became apneic and required intubation and ventilation. Her condition deteriorated and she was transferred to HSC on April 10, 1991. On admission to the Paediatric Intensive Care Unit, her pupils were fixed and dilated. CT Scan carried out at that time showed bilateral cerebral edema. Ophthalmic examination demonstrated bilateral retinal haemorrhages and detachment. Neurologic examination on the same day confirmed brain death. Respiratory support was continued until April 11, 1991 at which time support systems were discontinued.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 68
Evidence of Dr. Whitwell, 13/12/2007, at p. 55, line 5 to p. 56, line 18
Warrant for Post Mortem Examination, PFP000366
Final Autopsy Report, PFP000368

960. Also as a result of reviewing the hospital record, Dr. Smith was aware of some of the concerns raised by the physicians who had treated Kasandra at HSC. These including the following:

(i) Dr. Kobayashi and Dr. Micowitz, both neurologists, considered the injuries demonstrated were typical of abuse;

(ii) Dr. Bunic and Dr. Chow, both ophthalmologists, found ocular injuries, including bilateral detached retinas, compatible with traumatic injury; and,

(iii) Dr. Bohn, the Assistant Director of the PICU, had indicated to Dr. Milton that he had concerns about Kasandra's injuries being the result of inflicted trauma.

Reference: Dr. Smith's Written Evidence, PFP303346
Evidence of Dr. Whitwell, 13/12/2007, p. 192, line 12 to p. 195, line 16
HSC Records, PFP068535
HSC Records, PFP068373

961. In her evidence Dr. Whitwell confirmed that the history provided "a clear indication of potential child abuse". Furthermore, she agreed that as far as the treating physicians were concerned, this was a highly suspicious case with clinical findings suggestive of non-accidental head injury.

Reference: Evidence of Dr. Whitwell, 13/12/2007, p. 195, line 17 to p. 196, line 25

9.05(2) The Post Mortem Examination

962. Dr. Smith carried out the post mortem examination on April 12, 1991. Included in the abnormal findings were:

(i) Recent haematoma of the right occipital scalp;

(ii) Recent subdural haematoma;

(iii) Focal subarachnoid haemorrhage of the right occipital lobe;

(iv) Cerebral oedema;

(v) Bilateral optic nerve haemorrhage; and

(vi) Bilateral retinal haemorrhage.

963. The recent scalp haematoma in the right occipital region took the form of a ring shape, in the configuration of a donut, with a pale central core measuring 1.7 x 1.8 centimetres in diameter and an outer red contusion measuring 3 centimetres in diameter. The scalp haematoma was spatially related to a subdural haematoma in the right occipital region. Dr. Smith also found that the autopsy revealed evidence of a previous head injury with older subdural haemorrhage and subarachnoid haemorrhage as well as bilateral optic nerve haemorrhage and left retinal haemorrhage. Based on these findings, Dr. Smith concluded that the cause of death was cranio-cerebral trauma.

Reference: Dr. Smith's Written Evidence, PFP303346, at p.69
Report of Post Mortem Examination, PFP001399

964. Concerning her review of the post mortem examination, Dr. Whitwell commented favourably on the actual examinations conducted by Dr. Smith. Specifically, regarding the adequacy of the materials examined, she reported that "the pathology investigations were carried out appropriately". Regarding the histology, she noted that "a detailed description of the histology including the brain is in the report". Regarding the overall Report of Post Mortem Examination, her comments were:

> "This is a detailed report concerning both the external and internal findings. A summary of the findings is included at the end together with the cause of death. … The summary of the findings is morphologically correct."

Finally, she allowed that the previous head injuries were most likely traumatic in origin indicating prior possible child abuse.

Reference: Medico-Legal Report of Dr. Whitwell, PFP136020, at p. 4, 6

9.05(3) Dr. Smith's Opinion

965. Dr. Smith's opinion was that the findings of recent subdural haematoma, cerebral edema and bilateral retinal haemorrhages, that is, the triad of injuries, together with the contusion at the back of the head, supported a conclusion of traumatic head injury. Dr. Smith elaborated on this conclusion in his evidence at the Inquiry as follows:

> MS JANE LANGFORD: Dr. Smith, you concluded that Kasandra suffered cranial cerebral trauma, which I understand is blunt impact head injury, is that correct?
>
> DR. CHARLES SMITH: That – that's – yeah, head – that's correct, that's head injury due to a blunt application – or an application of blunt force, yes.
>
> MS JANE LANGFORD: What was the basis of that conclusion?
>
> DR. CHARLES SMITH: The autopsy revealed the presence of – of contusion or – or bruising in the scalp at the back of the head in association with the intracranial findings of subdural haemorrhage, swollen brain and others along with retinal and optic nerve sheath hemorrhages.
>
> So it was a combination of the single point of impact along with the evidence of damage to the brain or the Central Nervous System.
>
> MS JANE LANGFORD: You believed Kasandra's injuries were likely non-accidental?
>
> DR. CHARLES SMITH: That's correct.
>
> MS JANE LANGFORD: Why?
>
> DR. CHARLES SMITH: The explanation that was given to me – or not, I should say, there was no explanation given to me that – that accounted for them on an accidental basis.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 128, line 24 to p. 129, line 25
Dr. Smith's Written Evidence, PFP303346, at p. 69

966. In her evidence at the Commission, Dr. Whitwell agreed that Dr. Smith's findings on autopsy comprised the triad, together with evidence of an impact injury. She acknowledged that Dr. Smith's conclusion concerning the cause of death in this case was reasonable at the time given in 1991, and also acknowledged as correct that:

> There is a community of pathologists and clinicians who would still take the view that the injuries demonstrated by Kasandra indicates head injury in 2007.

Indeed, in light of the research and literature discussed in Section 9.01, this conclusion is undoubtedly accurate.

Reference: Evidence of Dr. Whitwell, 13/12/2007, p. 197, line 24 to p. 199, line 18
Evidence of Dr. Whitwell, 13/12/2007, p. 201, line 20 to p. 202, line 6

967. In her review of this case, Dr. Whitwell raised a concern that epilepsy was a possible cause of death was not fully explored. In her Medico-Legal Report, and in her evidence, she noted that there was "no discussion as to the potential of status epilepticus causing the brain damage." Dr. Smith testified that he did consider this possibility but he did not and does not accept that epilepsy can cause subdural haemorrhage and retinal/optic nerve sheath haemorrhages such as seen in the Kasandra case.

Reference: Evidence of Dr. Whitwell, 13/12/2007, p. 71, line 22 to p. 73, line 7
Medico-Legal Report of Dr. Whitwell, PFP136020, at p. 9
Evidence of Dr. Smith, 28/01/2008, p. 130, lines 1 to 10

9.05(4) The Preliminary Hearing

968. Dr. Smith was called to testify on behalf of the prosecution at the preliminary hearing into a charge laid against Kasandra's stepmother. Dr. Smith testified concerning his findings at autopsy. He noted specifically that in addition to the haematoma, the subdural haemorrhage and cerebral edema he found, the retinal haemorrhages and optic nerve haemorrhages were of particular significance as they pointed to possible inflicted traumatic head injury. Furthermore, he testified that it would be difficult to hypothesize an accidental event around the home producing the injuries he found which he described as resulting from a substantial force. At the same time, he allowed that one could not rule out an accidental event producing the injuries, but went on to emphasize that such an event would have to be very unusual.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP000411, at pp. 23 and 37
Dr. Smith's Written Evidence, PFP303346, at p. 69

969. Dr. Smith was asked about the evidence of the previous injuries which he had identified in his post mortem examination. He confirmed that his findings led him to believe that these were

serious and suspicious injuries. On the other hand, he made it clear that he did not believe that these were related to Kasandra's death in April, 1991. Specifically, Dr. Smith testified that he did not believe Kasandra would have died if she had not suffered a separate traumatic injury to her head at the later time.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP000411, at p. 30, line 12 to p. 32, line 24 and p. 81, lines 5-17
Dr. Smith's Written Evidence, PFP303346, at p. 70

970. Dr. Smith was questioned about the donut-like bruise he found on the right occipital region of the skull, and he allowed that a watch produced to him would be "a nice fit" and, on another occasion, "a very good match" with the bruise in question. Dr. Whitwell took issue with the overlay of the watch with the bruise on the back of the head referring to it as "inappropriate". Dr. Smith agrees in retrospect that this aspect of his evidence was speculative and should not have been given.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP000411, at p. 15, line 15 to p. 16, line 15 and p. 28, line 11-13
Evidence of Dr. Whitwell, 13/12/2007, p. 68, lines 1 to 24
Dr. Smith's Written Evidence, PFP303346, at p. 69

971. Dr. Smith was also questioned at the preliminary hearing concerning the possibility of epilepsy contributing to Kasandra's death. He testified that according to his understanding, epilepsy sets off an electro-chemical discharge in the brain but should not produce the subarachnoid and subdural haemorrhages seen on his post mortem examination. He addressed the issue in a similar manner in his evidence given at the Inquiry:

> MS JANE LANGFORD: Dr. Whitwell queried whether the recent subdural bleeding could be related to epilepsy. Did you consider that possibility?
>
> DR. CHARLES SMITH: Yes, I did.
>
> MS JANE LANGFORD: And what was your conclusion regarding it?
>
> DR. CHARLES SMITH: I – I do not recognize that eps – epilepsy causes subdural hemorrhage and all of the other changes, retinal/optic nerve sheath hemorrhage, and such that we saw in Kasandra.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP000411, at p. 62, lines 8 to 20
Dr. Smith's Written Evidence, PFP303346, at p. 70
Evidence of Dr. Smith, 28/01/2008, p. 130, lines 1 to 10

9.06 TAYLOR

9.06(1) The History and Circumstances

972. This was a consultation in respect of a post mortem examination conducted by Dr. Mark Rieckenberg, a pathologist at Thunder Bay Regional Hospital – McKellar. Dr. Smith believes that Dr. Cairns asked him to provide assistance to Dr. Rieckenberg. Dr. Smith spoke to Dr. Rieckenberg about the case by telephone.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 90
Letter from Dr. Rieckenberg to Dr. Smith dated August 28, 2996, PFP009740

973. Dr. Smith's essential recollection is that this infant boy, three months of age, died under suspicious circumstances in the family home. Dr. Smith was provided with a copy of the Warrant for Post Mortem Examination, Dr. Rieckenberg's Report of Post Mortem Examination, as well as certain slides and X-rays. The Warrant indicated that the boy was found dead in his cradle, lying on his abdomen, on July 31, 1996. He was last seen alive about three hours prior to being found dead. There was no history of any recent illness.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 90
Evidence of Dr. Whitwell, 13/12/2007, p. 91, line 3 to p. 72, line 1
Warrant for Post Mortem Examination, PFP009599
Report of Post Mortem Examination, PFP009623

974. The post mortem examination conducted in August 1, 1996 by Dr. Rieckenberg certified the cause of death as acute head injury. Included in the post mortem report were references to multiple old healing rib fractures, approximately eight in number, and copies of two radiology reports confirming a number of healing fractures. One of these reports contained the following reference:

> In the absence of known major trauma such as motor vehicle accident, these [the fractures] should be considered highly suspicious for child abuse.

Subsequently, since Dr. Smith considered it important to his consultation, he arranged for Dr. Rieckenberg to send him the actual rib tissues for his examination.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 90
Report of Post Mortem Examination, PFP009623
Letter from Dr. Rieckenberg to Dr. Smith, PFP009741

9.06(2) The Consultation Report

975. Admittedly, this was a difficult case. As reported by Dr. Rieckenberg, there was no obvious evidence of trauma to the scalp, no skull fractures, and no subgaleal haematomas. The positive findings noted by Dr. Rieckenberg were "diffusely swollen hemispheres with flattening of the gyri and sulci, right inferior temporal lobe lesion, compressed hemispheres and partial tearing of the corpus callosum."

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 90
Report of Post Mortem Examination, PFPF009623

976. On his review of the specimens, Dr. Smith confirmed a number of sites of haemorrhage. He was prepared to accept Dr. Rieckenberg's findings indicative of cerebral edema and partial tearing of the corpus callosum. Still, there was no gross evidence of subdural haemorrhage that one associates with traumatic injury to the head. The absence of haemorrhage in the eyes and optic nerves made a purely shaking injury unlikely, but Dr. Smith considered there was sufficient evidence to support a diagnosis of head injury due to blunt trauma. In this conclusion Dr. Smith was supported by the opinion of Dr. John Deck, a neuropathologist working for OCCO.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 131, lines 3 to 21
Dr. Smith's Written Evidence, PFP303346, at p. 90
Consultation Report, PFP009603
Report of Neuropathological Consultation, PFP009729

977. Dr. Whitwell did not agree with Dr. Smith's conclusion as set out in his Consultation Report (nor, clearly, with the opinion of Dr. Deck). In her Reports and her testimony she expressed the

view that there was likely over-reliance on "probable" artefact and non-specific findings. At the same time, she allowed that Dr. Smith was reliant on the findings of Dr. Rieckenberg, in particular as regards the partial tearing of the corpus callosum. She went on to say that such a finding is unusual unless severe forces are involved. Dr. Smith's evidence was that he was prepared to accept Dr. Rieckenberg's finding on his initial autopsy, and noted that the explanation advanced for Taylor's injury involved an extremely forceful impact. It is accepted that the pathologist conducting the autopsy is in the optimal position to make observations, and it is submitted that Dr. Rieckenberg's original finding is entitled to greater weight than Dr. Whitwell's later hypothesis.

Reference: Evidence of Dr. Whitwell, 13/12/2007, p. 97, line 1 and p. 106, line 19 to p. 107, line 4
Dr. Smith's Written Evidence, PFP303346, at p. 91
Autopsy Report Review Form, PFP009597
Medico-Legal Report of Dr. Whitwell, PFP136030

978. Dr. Rieckenberg had also noted gastric material in the airways and bilateral pulmonary congestion with occasional small pleural and thymic petechiae. Dr. Smith confirmed these findings and postulated that they may support a finding of an asphyxial event, that is, airway obstruction. However, as he noted in his Consultation Report, he thought these findings to be associated with the dying process and were less important than the head injury. Dr. Whitwell also dismissed the petechial haemorrhages and the histology of the lungs as non-specific and not indicative of an asphyxial mechanism. Dr. Smith accepts this conclusion but notes that he never advocated strongly for such a conclusion.

Reference: Dr. Smith's Written Evidence, PFP303346, at pp. 90-91 and 92
Evidence of Dr. Whitwell, 13/12/2007, p. 95, line 1
Consultation Report, PFP009603
Autopsy Report Review Form, PFP009597
Medico-Legal Report of Dr. Whitwell, PFP136030

979. Finally, Dr. Smith undertook a detailed examination of the healing rib fractures which had initially been identified. This included a consultation with Dr. Babyn, a radiologist at HSC.

Dr. Babyn was able to identify 10 rib fractures, likely the result of chest compression, with the qualification that certain ribs were difficult to visualize on the radiographs, and there might be others. Having examined all of the histologic evidence, Dr. Smith was able to confirm a minimum of at least 6 fractures of the right-sided ribs, and a minimum of at least 8 fractures of the left-sided ribs. Dr. Smith wishes to make it clear, and did so at the time, that these prior rib fractures played no part in the death of the infant on July 31, 1996. At the same time, they served as evidence that this infant had likely been abused previously, and not necessarily on a single occasion. Dr. Whitwell agreed that the circumstances were suspicious, including the multiple rib fractures.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 91
Evidence of Dr. Whitwell, 13/12/2007, p. 240, line 17 to p. 241, line 3
Consultation Report, PFP009603
Diagram, PFP009620
Diagram, PFP009670
Medico-Legal Report of Dr. Whitwell, PFP136030

9.06(3) The Preliminary Hearing

980. Dr. Smith was called to testify at the request of the defence at the preliminary hearing into the charges brought against the parents. In the course of the hearing the defence had advanced the theory that the infant's injury had been the result of falling from his father's arms with Taylor's head coming into forceful contact with his father's rising knee in an attempt to break Taylor's fall. In the course of his testimony, Dr. Smith was asked whether the injuries he saw could be explained by such an event. His evidence, as accurately summarized by Justice Clarke of the Ontario Court, was as follows:

> The medical evidence, particularly the evidence of Dr. Charles Smith, a paediatric pathologist, in my judgment, is quite clear. Given the explanation tendered by [the father], it is Dr. Smith's expert opinion that there is a possibility that the injury could have occurred in the manner described, but there is also an equal possibility that it could not have occurred in that manner.

In the result, both father and the mother were discharged on all counts. This discharge was reviewed by the Crown and upheld by Justice Kozak sitting in the Ontario Superior Court of Justice.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 91
Judgment of Kozak, J., PFP009639, at p. 10

981. Dr. Smith has always viewed his opinions in the Taylor matter as reasonable and his testimony as fair and impartial. At the Commission, Dr. Whitwell was asked about Dr. Smith's evidence at the preliminary hearing. She was clear in her Report that she had not reviewed any testimony. When she was taken to the excerpt reproduced above, she conceded that Dr. Smith's evidence had to be characterized as "eminently fair". An impartial review of the evidence in its entirety supports this conclusion as was confirmed by the Decisions of Mr. Justice Clark and Mr. Justice Kozak.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 133, line 23 to p. 134, line 6
Dr. Smith's Written Evidence, PFP303346, at p. 92
Evidence of Dr. Whitwell, 13/12/2007, p. 243, line 10 to p. 245, line 3
Medico-Legal Report of Dr. Whitwell, PFP136030

9.07 NICHOLAS

9.07(1) The History and Circumstances

982. This case involved an exhumation and a second post mortem examination conducted by Dr. Smith. Briefly, Nicholas was approximately 11 months of age at the time of his death on November 30, 1995. He was in the care of his mother at his home in Sudbury on that date when he reportedly stood up while playing under a sewing table and bumped his head. He began to cry and when his mother picked him up, he apparently had trouble catching his breath and then stopped breathing. His mother took the child next door for assistance which resulted in an ambulance being called. Nicholas could not be resuscitated at Sudbury General Hospital and was pronounced dead that same afternoon.

Reference: Final Autopsy Report, PFP007666
Medico-Legal Report of Dr. Crane, PFP135519, at p. 3

983. An investigation was commenced by the Sudbury police. The investigating officer attended at the hospital where Nicholas was admitted and noted a slight bump located on the top right side of the child's head. Swelling was slight and the skin was not broken. No bruising was observed.

Reference: Homicide/Sudden Death Report, PFP007633

984. The responsible Coroner, Dr. James Deacon, issued a Warrant for Post Mortem Examination on November 30, 1995. The examination was conducted by Dr. T.C. Chen, the pathologist at Sudbury General Hospital, on December 1, 1995. The initial findings were essentially negative. The x-rays were normal and the only positive findings reported were a few petechiae on the pleura. The bump on the head noted in the police report was not identified.

Reference: Warrant for Post Mortem Examination, PFP007622
Coroner's Investigation Statement, PFP007624

985. A Final Autopsy Report was later issued on August 14, 1996 (note, more than 9 months following the autopsy). That Report summarized the positive findings as follows:

(a) Few petechial haemorrhages on both pleura, epicardium and thymus;

(b) Moderate pulmonary congestion and oedema; and

(c) Patchy mild cerebral oedema.

Dr. Chen certified the cause of death as follows:

> No anatomical or toxicological cause of death has been established. Autopsy findings are consistent with S.I.D.S. providing all other aspects of the investigation are negative.

That Report was characterized as "inadequate" by the reviewer, Dr. Crane, for various reasons specified in his medico-legal report and his evidence.

Reference: Autopsy Final Report, PFP007644
Medico-Legal Report of Dr. Crane, PFP135519, at p. 3, 5-7
Evidence of Dr. Crane, 19/11/2007, p. 256, line 3 to p. 258, line 12

986. Dr. Deacon, the Coroner, had initially given the means of death as "natural". Following receipt of the Final Autopsy Report, Dr. Deacon issued a revised Coroner's Investigation Statement supplemented with the following report:

> The toxicology studies were all negative. The recently received Autopsy Report concludes that there is 'no anatomical or toxicological cause of death' and that the 'autopsy findings are consistent with S.I.D.S'. I think that the guidelines from the Office of the Chief Coroner would place this in the S.U.D.S. category because of the association of the death with the bump on the head.

In light of the conclusion in the Final Autopsy Report, Dr. Deacon also changed the means of death from "natural" to "undetermined".

Reference: Coroner's Investigation Statement, PFP007626

987. Dr. E. Uzans, the Regional Supervising Coroner responsible for the Sudbury region, was not content with the materials received by him in relation to this case and wished to have the case investigated further. He was confronted with a situation where the death was viewed as sufficiently suspicious from the outset that the police conducted an investigation, yet the autopsy had failed to reveal a cause of death. Accordingly, he asked Dr. Cairns, the Deputy Chief Coroner, to have the case reviewed by the Pediatric Death Review Committee. This decision to refer the case for review was described by Dr. Crane as "an example of good practice".

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 75
Medico-Legal Report of Dr. Crane, PFP135519, at p. 3, 6

9.07(2) The Consultation Report

988. At the request of Dr. Cairns, the Chair of the Pediatric Death Review Committee, Dr. Smith was asked to undertake an initial review of the case. As part of his preliminary investigation, Dr. Smith requested that Dr. Babyn, a radiologist at HSC, review the copies of the X-rays received by Dr. Smith. Dr. Babyn subsequently sent a report of his examination of these films to Dr. Cairns on January 13, 1997. Dr. Babyn reported that his examination showed mild diastasis of the skull

sutures and a possible fracture of the left mandible although he noted that the quality of the films was poor.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 75
Letter to Dr. Cairns by Dr. Babyn, PFP008310

989. Dr. Smith subsequently prepared a Consultation Report dated January 24, 1997 which outlined his views based on the materials reviewed by him to that point in time. In short, he concluded that the findings on the initial autopsy, together with the report of the X-rays provided by Dr. Babyn, were indicative of cerebral edema. Having regard to the bump on the head noted in the course of the investigation, Dr. Smith attributed the death to blunt head injury. In addition, the Report postulated a possible terminal asphyxial mechanism based on the presence of the thoracic petechiae.

Reference: Consultation Report, PFP007656

990. In his review of the Consultation Report, Dr. Crane referred to Dr. Smith's conclusion as "flawed" in that, in his opinion, evidence of a swollen brain was not a sufficient basis to attribute death due to blunt injury, and the thoracic petechiae found were not an adequate basis to suggest a terminal asphyxial event. In retrospect, Dr. Smith accepts and agrees with Dr. Crane's opinions.

Reference: Medico-Legal Report of Dr. Crane, PFP135519, at p. 6
Dr. Smith's Written Evidence, PFP303346, at p. 78

991. In addition, in his Consultation Report Dr. Smith noted that a left-sided mandibular fracture was present. That statement was incorrect. As set out in Dr. Babyn's report to Dr. Cairns, there was suspicion of a fracture in this area although it was not confirmed.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 75
Consultation Report, PFP007656

9.07(3) The Second Post Mortem Examination

992. In view of the questions raised in the case, the Attorney General ordered an exhumation of Nicholas' body which took place on June 25, 1997. Dr. Smith performed a second post mortem examination on June 26, 1997. A copy of the Report on that examination was signed by Dr. Smith on August 6, 1997.

Reference: Medico-Legal Report of Dr. Crane, PFP135519, at p. 4
Report of Post Mortem Examination, PFP007660

993. It is to be noted at the outset that the post mortem report confirmed that Dr. Babyn's review of the original X-rays, as opposed to the copies on which he had reported earlier, showed no bone fractures, and specifically no fracture of the mandible which had been suspected earlier. At the same time, included in the summary of the abnormal findings were references to haemorrhagic discolouration of the right parietal bone and haemorrhagic discolouration along the skull sutures. Dr. Smith concluded, as stated in his Report, that his findings, together with the "split skull sutures", were consistent with cerebral oedema and blunt force injury. The Report also repeated the reference to hypoxic ischaemic changes. The Report concluded that "in the absence of a credible explanation, in my opinion the post mortem examination findings are regarded as resulting from non-accidental injury". In the conclusion of his Report, Dr. Smith stated it to be his opinion that the cause of death was cerebral oedema (consistent with blunt force injury).

Reference: Report of Post Mortem Examination, PFP007660

994. Dr. Crane commented upon Dr. Smith's conclusions in his medico-legal report concerning this case and in his evidence at the Commission. To summarize, he stated that the discolouration noted likely represented post-mortem staining and the diastasis of the sutures did not have the significance attributed to it by Dr. Smith. In short, Dr. Crane stated it to be his opinion that

Dr. Smith's conclusions that the child died as a result of blunt trauma and that this was likely due to non-accidental injury could not be sustained.

Reference: Evidence of Dr. Crane, 20/11/2007, p. 19, line 7 to p. 24, line 5
Medico-Legal Report of Dr. Crane, PFP135519, at pp. 6 to 7

995. Again, Dr. Smith accepts and agrees with the conclusions reached by Dr. Crane. In retrospect, he admits that he was overly focused on the cause and effect of the head injury described in the history. Dr. Smith did not and does not believe that a trivial bump on the head resulting from standing up under a table in the home is likely to be fatal; indeed, he thinks it to be unlikely in the extreme. On the other hand, he is very aware of the fact that a blunt impact to the head of sufficient force can cause death. In light of the history, Dr. Smith agrees now that he over-interpreted findings which were non-specific, and did not point to death resulting from head injury as a consequence of blunt force or otherwise. Furthermore, he agrees that the references to possible hypoxic-ischaemic injury were also based on non-specific findings and were erroneous. His statement that in the absence of a credible explanation, the findings were the result of non-accidental injury was also in error.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 138, line 1 to p. 139, line 5
Dr. Smith's Written Evidence, PFP303346, at p. 76

9.07(4) Subsequent Events

996. The findings contained in Dr. Smith's post mortem report were communicated to the Sudbury police. The police continued their investigation but concluded in December, 1997 that there was insufficient evidence to lay charges against Nicholas' mother. However, the police advised the Children's Aid Society of the circumstances, and the fact that the cause of death was "undetermined" as opposed to "accidental". Subsequently, the CAS launched an application for Crown wardship in respect of Nicholas' sister who was born June 27, 1998.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 76

997. Affidavits were filed by CAS on behalf of Dr. Smith and Dr. Cairns. In Dr. Smith's Affidavit he swore that he was of the opinion, at a high level of certainty, that the death of Nicholas was due to non-accidental injury. He went on to say that "my opinion is that the injury was due to a blunt impact to the head, although, it is possible that it was caused by asphyxia." Dr. Cairns' Affidavit confirmed the opinion of Dr. Smith.

Reference: Affidavit of Dr. Smith, PFP008407
Affidavit of Dr. Cairns, PFP007674

998. This action taken by CAS prompted a response on the part of Nicholas' mother's family. The family retained Dr. W. Halliday, a neuropathologist, as well as Dr. Derek deSa, a pathologist at the University of British Columbia. The solicitors acting on behalf of the mother's family provided multiple materials on the part of Drs. Halliday and deSa to dispute the position taken by the CAS.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 76
Affidavit of Dr. Halliday, PFP008400
Affidavit of Dr. Halliday, PFP007694
Letter from Dr. Halliday to Mr. Keaney, PFP007682
Letter from Derek de Sa to Mr. Keaney, PFP007691

999. Given the varying opinions concerning the case, OCCO retained Dr. Mary Case, a forensic pathologist in St. Louis, to review the case. Dr. Case provided her report to Dr. David Chiasson, CFPU, on March 6, 1999. Dr. Case did not agree that the cause of death was head injury and did not agree that there was "cerebral oedema consistent with blunt force injury". Similarly, she did not attribute death to an asphyxial mechanism. In the circumstances, she concluded that both the cause and manner of death should be categorized as undetermined. Based on this opinion, the CAS withdrew the child protection application and rescinded the registration of Nicholas' mother on the child abuse register.

Reference: Report of Dr. Mary Case, PFP007687

1000. Following the decision taken by OCCO in this case, Dr. Smith recalls a meeting with Dr. Young which took place at Dr. Young's request. The focus of the meeting, as Dr. Smith recalls it, was to emphasize to Dr. Smith that in the future Dr. Young wanted Dr. Smith to be firmly in the mainstream of expert pathological opinion. Dr. Smith recalls the analogy of the tree being used. Dr. Young characterized Dr. Smith and Dr. Halliday, in relation to the Nicholas case, as being on the outer branches whereas Dr. Case was firmly in the middle – hugging the trunk as Dr. Young put it. Dr. Young indicated that he wanted to see Dr. Smith similarly "hugging the trunk" in the future.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 77

9.07(5) The CPSO Proceedings

1001. The above-described sequence of events also resulted in complaints to OCCO, to the Ombudsman, and to the CPSO on the part of Nicholas' maternal grandfather. An early and separate complaint to the CPSO in 1998 concerned the fact that Dr. Smith was accompanied by his son at Nicholas' disinterment thereby allegedly demonstrating contempt and disrespect for the family of the deceased. This complaint was initially forwarded to OCCO and responded to by Dr. Young. Dr. Smith was apprised of the complaint by OCCO and explained to OCCO why his son was in attendance with him and emphasized that there was no disrespect for Nicholas' family intended. At the same time, Dr. Smith apologized for the fact that his son attended with him, which apology was conveyed to the complainant. Dr. Young went on to note that it had been brought to Dr. Smith's attention that he was in breach of the policies of OCCO regarding exhumations, he had acknowledged that breach and that he would be expected to abide by the rules in the future.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 77
Letter from Maurice Gagnon to CPSO, PFP008057
Letter from Dr. Smith to Dr. Young, PFP007985
Letter from Dr. Young to Maurice Gagnon, PFP007955

1002. On November 30, 1999 a further complaint was filed with the CPSO by Nicholas' grandfather. Initially the CPSO concluded that it did not have jurisdiction in the matter. In September, 2000 the Health Professions Appeal and Review Board determined that the CPSO did, in fact, have jurisdiction to consider such a complaint. An investigation was therefore ordered by the CPSO and an investigator assigned. Dr. Smith responded to the complaint.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 77
Letter from Maurice Gagnon to Dr. Bonn, PFP144824
Letter from Dr. Smith to Ms Doris, PFP145156

1003. As part of its investigation, the Complaints Committee engaged a three-member independent panel of experts to provide assistance in arriving at a decision concerning the complaint. The panel was made up of two forensic pathologists and one paediatric pathologist. The Committee released its decision on October 15, 2002.

Reference: Complaints Committee Decision and Reasons, PFP034848
Dr. Smith's Written Evidence, PFP303346, at p. 77

1004. In its decision, the Complaints Committee endorsed the expert panel's conclusion that "Dr. Smith met the standard expected of a pathologist assisting the Coroner in an investigation." However, the panel noted a number of deficiencies and omissions in Dr. Smith's approach in the case, which the Committee accepted and indicated that it was extremely disturbed by them. In summary, those deficiencies identified by the panel and Dr. Smith's response are as follows:

(a) Dr. Smith failed to obtain information on Nicholas' head circumferences in life – Dr. Smith agrees;

(b) Dr. Smith over-interpreted findings to suggest a diagnosis of head trauma – Dr. Smith agrees;

(c) Dr. Smith exaggerated the wording on the X-ray reports by misquoting the radiologic findings respecting the mandible (in his Consultation Report) – Dr. Smith agrees;

(d) Dr. Smith implied that "herniation of the brain stem" was present and would be the terminal event, yet such herniation was not identified in the original autopsy by Dr. Chen – Dr. Smith agrees;

(e) Dr. Smith over-interpreted the findings of cerebral oedema, including the splitting of the sutures, as strongly suggestive for trauma – Dr. Smith agrees;

(f) Dr. Smith's suggestion that cerebral oedema was due to blunt force was incorrect – Dr. Smith agrees;

(g) Dr. Smith's implication that blunt head trauma caused cerebral oedema was not supported by the information that he received about a "slight bump" on the child's head – Dr. Smith agrees, and as indicated previously, this is what likely led him into error in this case.

The Complaints Committee declined to refer the matter on to the Discipline Committee. Rather, the Complaints Committee required Dr. Smith to attend before a panel of the Committee to be cautioned, which he did.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 77-78
Decision of the Complaints Committee, PFP034848

9.08 TYRELL

9.08(1) The History and Circumstances

1005. Dr. Smith does not have any recollection of any information coming to his attention regarding this case until the time that he assumed responsibility for the post mortem examination on

January 24, 1998. The Warrant for Post Mortem Examination was dated January 23, 1998. It noted that the deceased boy was three years, 11 months in age. The brief case history provided as follows:

> According to history child fell and hit his head during the day – he was unresponsive and groaning and was taken to Humber R. Hosp at 5:06 a.m. on Jan. 19th and sent to HSC and arrived at 7:05 a.m. 19/1. CT scan R. subdural – unresponsive, unequal pupils no obvious sign of external trauma → ped ICU. ICP monitor inserted through frontal twist drill hole – deteriorated gradually extubated and pron. d. on 23/1/98.

Reference: Warrant for Post Mortem Examination, PFP012438

1006. A review of the medical records which accompanied Tyrell's body supplemented the brief case history set out by the Coroner. Tyrell was being cared for by his caregiver in the absence of his father. In the past, he had been healthy until he fell on the evening of January 18, 1998. The account Tyrell's caregiver gave was that Tyrell was jumping on the couch and jumped backward off the couch, lost his footing and fell backward hitting his head on a marble table or a tile floor. He then got up and tried to run forward but fell and struck his forehead. He cried but then settled and slept. At 4:00 a.m., he was found unresponsive and taken to the Emergency Department at Humber Memorial Hospital.

Reference: Final Autopsy Report, PFP012348
Medico-Legal Report of Dr. Crane, PFP135538, at p. 2

1007. On admission to Humber Memorial Hospital, Tyrell was unconscious with fixed, dilated pupils. He was transferred to HSC the same morning. A CT scan showed a right-sided subdural haematoma with cerebral oedema and a mid-line shift to the left. An ophthalmologic consultation by Dr. Levin noted a few non-specific retinal haemorrhages with the most likely differential diagnosis being "shaken baby". A general surgical consultation also recommended that child abuse be ruled out.

Reference: Ophthalmology Consultation Note, PFP012336
General Surgery Consultation Note, PFP012239
Medico-Legal Report of Dr. Crane, PFP135538, at p. 2

1008. The child's condition continued to deteriorate and he was pronounced dead at 1540 hours on January 23, 1998. The Final Clinical Death Note was completed by Dr. Cox who had been Tyrell's responsible physician at HSC. In that note, Dr. Cox stated the following:

> Severe closed head injury with subdural haemorrhage and gross cerebral oedema. Progressive ↑ in I.C.P. with bradycardia and ↑ B.P. Query non accidental injury.

The reviewer, Dr. Crane, agreed that this was a suspicious death.

Reference: Final Clinical Death Note, PFP012198
Evidence of Dr. Crane, 21/11/2007, p. 234, line 23 to p. 235, line 9

9.08(2) The Post Mortem Examination

1009. The abnormal findings which were identified on Dr. Smith's autopsy were as follows:

1. CNS trauma, with
   - 1.1 Subdural haemorrhage right, acute
   - 1.2 Cerebral edema, right hemisphere larger than left with
     - 1.2.1 Cerebellar tonsillar herniation
     - 1.2.2 Hippocampal uncal herniation
   - 1.3 Neuronal eosinophilic degeneration, diffuse
2. Contusions of scalp
3. Bilateral optic nerve sheath haemorrhage, with
   - 3.1 Retinal haemorrhage, focal

The scalp contusions noted included an area in the right frontal region superior to the right eyebrow as well as an area of the left occipital scalp. On a preliminary basis, subject to the report of the neuropathological examination, Dr. Smith concluded that the cause of death was central nervous system trauma.

Reference: Dr. Smith's Written Evidence, PFP303346, at p. 96
Report of Post Mortem Examination, PFP012442

1010. Some time later Dr. Smith received the report of the neuropathological examination carried out by Dr. Becker. This summary which reported on Dr. Becker's examination of the brain was later expanded into a formal Neuropathological Consultation Report which explains certain of Dr. Becker's findings and opinions. In light of the examinations by both Dr. Smith and Dr. Becker,

Dr. Smith incorporated Dr. Becker's summary and finalized the post mortem report on December 12, 1998, certifying the cause of death as CNS trauma.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 136, line 16 to p. 136, line 26
Dr. Smith's Written Evidence, PFP303346, at p. 96
Central Nervous System Report, PFP012148
Neuropathology Consultation Report, PFP012156
Report of Post Mortem Examination, PFP012442

1011. In his review of this case, Dr. Crane acknowledged in his Medico-legal Report that the autopsy report was "reasonably detailed and, appropriately, the brain was retained and subject to neuropathological examination". Moreover, Dr. Crane testified that he did not take issue with the cause of death as articulated by Dr. Smith. Dr. Crane did take issue with the fact that the post mortem report did not discuss the mechanism of death, specifically, as follows:

> … there is no discussion in the report as to how the fatal head injury may have occurred e.g. was it consistent with a fall or was it due to blows to the head?

As discussed in Section 4.02(4), Dr. Smith's Report conformed to the standard convention in use at the time which did not address the subject of mechanism of death in the Report.

Reference: Medico-Legal Report of Dr. Crane, PFP135538, at p. 3
Evidence of Dr. Crane, 20/11/2007, p. 200, line 11-24

9.08(3) Dr. Smith's Opinion

1012. In consequence of his post mortem examination, Dr. Smith knew that he was dealing with a child who had suffered a devastating head injury. He was also aware that there were questions concerning the cause of the injuries, one of the possible causes suggested being shaken baby syndrome. He did not believe that shaking was at all likely, particularly in view of the age of the child. The alternate cause advanced was a fall although he was aware that the descriptions of the fall were not necessarily consistent, and in any event the fall had not apparently actually been witnessed

by Tyrell's caregiver. Dr. Smith believed that he was dealing with injuries that exceeded what he understood could legitimately be attributed to a household fall.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 135, lines 1 to 14
Dr. Smith's Written Evidence, PFP303346, at p. 96

1013. Dr. Smith knew that his opinion was shared by Dr. Becker who specialized in paediatric neuropathology and in whose expertise Dr. Smith placed great confidence. Dr. Becker's views were set out explicitly in his separate report as follows:

> In my view, the extent of the subdural haemorrhage and the degree of right hemispheral cerebral oedema resulting in neurological deterioration with herniation and secondary hypoxic ischaemic encephalopathy is not consistent with the information available to me. In my clinical experience I have not seen a child of four years die as a result of a fall or jump off a couch. The extent of the neuropathology suggests the force of impact to be greater than one generated by a household fall.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 136, lines 18 to 20
Neurological Consultation Report, PFP012156

1014. Dr. Crane acknowledged that it is "an important function" of the pathologist to attempt to correlate the information received from clinicians with the pathological findings. He specifically agreed that the opinions of Dr. Levin, the ophthalmologist, and Dr. Cox, the internist, were important to consider, as well as the opinions of the surgeon, Dr. Rutka and a child abuse specialist, Dr. Mian.

Reference: Evidence of Dr. Crane, 20/11/2007, p. 203, line 21 to p. 204, line 5
Evidence of Dr. Crane, 21/11/2007, p. 228, line 3 to p. 232, line 21

1015. Although he allowed that it is a matter of "discretion" for the pathologist to form an opinion as to how the head injury was sustained, Dr. Crane concluded that the injuries could be explained by the child's jump described in the case. He made it clear that he arrived at this conclusion based on his interpretation that the evidence supported a contre-coup injury. At the same time, he acknowledged that Dr. Smith was justified in placing reliance on the opinion of Dr. Becker who stated in his Report that there was no evidence of contre-coup injury.

Reference: Evidence of Dr. Crane, 20/11/2007, p. 203, lines 15 to 20, p. 212, line 16 to p. 213, line 12 and p. 207, lines 5 to 10
Evidence of Dr. Crane, 21/11/2007, p. 233, line 8 to p. 234, line 22
Neuropathology Consultation Report, PFP012156

1016. Dr. Smith was asked about this difference of opinion at the Inquiry, and his evidence was as follows:

> MS JANE LANGFORD: Dr. Smith, you are aware that the reviewers conclude that Tyrell's injuries could be explained by his history on the basis of a classic contrecoup injury. You understand that?
>
> DR. CHARLES SMITH: Yes, I understand that. Yes.
>
> MS JANE LANGFORD: Did you consider that explanation at the time?
>
> DR. CHARLES SMITH: I did, yes. Yes.
>
> MS JANE LANGFORD: And what was your conclusion regarding it?
>
> DR. CHARLES SMITH: There was no contrecoup injury.
>
> MS JANE LANGFORD: Why not?
>
> DR. CHARLES SMITH: The contrecoup in the young is uncommon. The younger you are the more uncommon it is, and that has to do with the, as I understand it, with the mechanical structure, or the integrity of the brain in the infant or the young child.
>
> And, so first of all, one has to be very cautious about making that diagnosis, though it does – it does occur.
>
> The second is that the pattern of – of contusion, or – or hemorrhage, or injury in the brain was not one (1) that I recognized to be diagnostic of a contrecoup injury.
>
> And then – and then my third response would be that the possibility was something that Dr. Becker and I had considered. Dr. Becker was the neuropathol – pediatric neuropathologist who often consulted for me and consulted in this case.
>
> And he – who had much more experience in the pediatric brain than I had – was also of the firm opinion that this was not a contrecoup injury."

Reference: Evidence of Dr. Smith, 28/01/2008, p. 135, line 15 to p. 136, line 23

1017. In the result, it can be seen that the differing opinions in this case come down to contrary conclusions regarding the history in light of the injuries, premised largely on whether or not there was a contre-coup injury. In this regard, it should be pointed out that Dr. Becker was the pediatric neuropathological specialist, whom we know had long experience dealing with injuries in children, and who had the benefit of examining the brain in a fresh state, whose opinion it was that there was no contre-coup brain injury.

1018. As noted above, Dr. Crane also made it clear that his opinion was premised on the injury resulting from a jump as opposed to a fall. Dr. Crane postulated the theory that this was not simply a case of a child falling backward, but a situation of a child jumping so that there was a potential trajectory of the child before striking the back of his head on the marble table or the tile floor. Dr. Crane allowed that knowledge about low level falls has continued to accumulate, including more recent bio-mechanical models which have shown that comparatively low level falls may generate sufficient force to cause serious and fatal head injury.

Reference: Evidence of Dr. Crane, 20/11/2007, p. 219, line 1 to p. 220, line 5

9.08(4) The Preliminary Hearing

1019. Dr. Smith's next involvement came at the preliminary hearing concerning the charge brought against Tyrell's caregiver. Dr. Smith was called to testify by the Crown. He confirmed his opinion in his testimony at that time that, in the absence of a credible explanation, he viewed the injury as non-accidental. He testified that the force required to produce the injuries he saw in the Tyrell case would be greater than one would expect as a result of an ordinary household fall. He made specific reference to articles in the literature that described the degree of force required for a fatal outcome from a fall to be very significant. At the same time, he stated that there were other people who would disagree with his conclusions based on the literature. He allowed that children can die from time to time in bizarre accidents around the home, but that did not include a fall as he understood had been described in this case.

Reference: Evidence of Dr. Smith, 28/01/2008, p. 134, line 17 to p. 135, line 14
Dr. Smith's Written Evidence, PFP303346, at p. 96
Dr. Smith's Preliminary Hearing Evidence, PFP012356, at pp. 1-37 and PFP105484, at pp. 1-43

1020. Dr. Crane was critical of Dr. Smith's testimony at the preliminary hearing. He noted that there were pathologists at the time who took the view that "it would take a very considerable fall to

cause the kind of injuries that Tyrell suffered in this case". However, despite the uncertainty of diagnosis, or perhaps because of it, he made the point that it is the responsibility of the expert to consider all possible causes, and to provide balanced testimony in relation to them. Dr. Smith accepts that his evidence minimizing the likelihood of an accidental cause was overly dogmatic and not appropriately balanced. Indeed, in view of the thesis proposed by Dr. Crane, if this was not a short distance fall but rather a flying leap involving very different forces, the possibility of an accidental cause becomes more reasonable.

Reference: Evidence of Dr. Crane, 22/11/2007, p. 18, lines 13 to 25
Medico-Legal Report of Dr. Crane, PFP135538, at pp. 4-5
Evidence of Dr. Smith, 28/01/2008, p. 137, lines 2 to 11
Dr. Smith's Written Evidence, PFP303346, at p. 98

1021. Dr. Crane also called into question Dr. Smith's evidence in which he raised the possibility that if the child had been struck by 10 blows in succession, that might have created the degree of force to cause his death. Dr. Smith agrees that this example was inappropriate in the absence of a basis for it.

Reference: Dr. Smith's Preliminary Hearing Evidence, PFP012356, at p. 31
Evidence of Dr. Crane, 20/11/2007, p. 227, lines 1 to 21

1022. Finally, in his testimony Dr. Smith outlined aspects of the profile of the type of person who might commit an asphyxial-type homicide of a child. Dr. Crane, who allowed that this evidence was elicited on cross-examination, still characterized it as inappropriate, which with the benefit of hindsight and greater understanding, Dr. Smith agrees.

Reference: Evidence of Dr. Crane, 20/11/2007, p. 283, lines 8 to 25
Dr. Smith's Preliminary Hearing Evidence, PFP105484, at p. 18

1023. Following the preliminary hearing, Tyrell's caregiver was committed to stand trial. In the lead up to the trial there were two significant developments. First, statements attributed to Tyrell's caregiver which were to be introduced at the trial were excluded as a result of a pre-trial Ruling by

Mr. Justice A. Campbell. Second, multiple additional and conflicting opinions were generated on the part of both the Crown and the defence. Having regard to these developments, the ultimate decision taken was to stay the charge against Tyrell's caregiver at the request of the Crown.

Reference: Reasons for Ruling, PFP012079

PART 10 - CONCLUSION

1024. This Commission was established on the spectre of nineteen "miscarriages of justice" caused by Dr. Smith. On analysis of the cases in the context of the culture of pediatric forensic pathology in Ontario in the 1980s and 1990s and the legislative and institutional structure of the coronial system in Ontario, the fallacies of the widely publicized results of the Chief Coroner's review have been exposed. The evidence supports more a more balanced conclusion.

1025. First, all nineteen of the cases reviewed by the Commission were "criminally suspicious" deaths:

(a) Five of the nineteen cases were "suspicious" because the death was a disproportionate consequence of a common occurrence:

(i) 16 month-old Amber died after allegedly falling down five carpeted stairs in her home;

(ii) 3 ½ year-old Valin died unexpectedly in her sleep;

(iii) 11 month-old Nicholas died after bumping his head on the underside of a sewing table in his home;

(iv) 2 ½ year-old Kenneth allegedly got tangled in his bed sheets and suffocated; and

(v) 4 year-old Tyrell died after allegedly hitting his head on a coffee table in his home.

(b) Eight of the nineteen cases were "suspicious" because the child died with injuries classically associated with abuse:

(i) 1 year-old Tamara died with a frenulum tear and multiple bone fractures of varying age;

(ii) 8 month-old Paolo died with multiple bone fractures of varying age;

(iii) 4 month-old Joshua died with a avulsion fracture of the left tibia (ankle);

(iv) 2 month-old Dustin died with a triad of subdural hemorrhages, cerebral edema and retinal/optic nerve hemorrhage;

(v) 5 week-old Gaurov died with a triad of acute subdural and subarachnoid hemorrhage, bilateral retinal/optic nerve hemorrhages and cerebral edema;

(vi) 3 year-old Kasandra died with recent contusion of the scalp and a triad of subdural and subarachnoid hemorrhage, bilateral retinal/optic nerve hemorrhages and cerebral edema;

(vii) 3 month-old Taylor died with at least 14 healing rib fractures; and

(viii) 3 month-old Tiffani died with multiple rib fractures and signs of malnourishment.

(c) Two of the nineteen cases were suspicious because of statements made by the caregiver at the time of the infant's death, prior to any death investigation:

(i) The mother of 5 month-old Delaney confessed to having killed Delaney on the day Delaney was discovered. She later confessed to having put her fingers down Delaney's throat three times;

(ii) The mother of 3 year-old Katharina confessed to having smothered Katharina with a pillow on the day Katharina was discovered.

(d) Four of the nineteen cases were "suspicious" because the infants were found at or immediately prior to death with evidence or in circumstances of obvious trauma:

(i) Neo-natal Baby M was found in the toilet of his mother's home;

(ii) Neo-natal Baby F was found in a plastic bag in her mother's closet;

(iii) 21 month-old Jenna was taken to the hospital with multiple skin contusions, abrasions and burns; and

(iv) 7 year-old Sharon was found scalped and lying in a pool of blood in the basement of her home with multiple penetrating wounds to her body.

1026. These suspicious circumstances belie the suggestion that it was Dr. Smith's opinions and conclusions in any of the nineteen cases that created suspicion and triggered a criminal investigation.

1027. Second, in twelve of the nineteen cases, Dr. Smith's critical findings, opinions and conclusions were substantiated, corroborated or confirmed by the findings, opinions and conclusions of clinicians involved in the care and treatment of the deceased or qualified experts retained after death:

(a) In the Valin case, Dr. Smith's findings, opinions and conclusions were variously corroborated by the findings, opinions and conclusions of Dr. Rasaiah (pathologist), Dr. Ferris (pathologist), Dr. Jaffe (pathologist), Dr. Mian (child abuse expert) and Dr. Zehr (gynecologist);

(b) In the Sharon case, Dr. Smith's findings, opinions and conclusions were supported by the findings, opinions and conclusions of Dr. Wood (odontologist) and Dr. Chiasson (pathologist);

(c) In the Joshua case, Dr. Smith's findings, opinions and conclusions were corroborated by the findings, opinions and conclusions of Dr. Jaffe (pathologist);

(d) In the Baby M case, Dr. Smith's findings, opinions and conclusions were supported by Dr. Jaffe (pathologist);

(e) In the Baby F case, Dr. Smith's findings, opinions and conclusions were supported by Dr. Chiasson (pathologist);

(f) In the Amber case, Dr. Smith's findings, opinions and conclusions were supported by the findings, opinions and conclusions of Dr. Barker (intensivist), Dr. Driver (child abuse expert) and Dr. Chuang (pediatric neuroradiologist);

(g) In the Tamara case, Dr. Smith's findings, opinions and conclusion were supported by the findings, opinions and conclusions of Dr. Dowling (pathologist);

(h) In the Kenneth case, Dr. Smith's findings, opinions and conclusions were supported by the findings, opinions and conclusions of Dr. Rao (pathologist) and Dr. Huyer (child abuse expert);

(i) In the Dustin case, Dr. Smith's findings, opinions and conclusions were supported by the findings, opinions and conclusions of Dr. Pearse (radiologist) and Dr. Padfield (pediatrician);

(j) In the Gaurov case, Dr. Smith's findings, opinions and conclusions were supported by Dr. Bohn (intensivist), Dr. McGreal (neurologist), Dr. Huyer (child abuse expert) and Dr. Pinsloo (pathologist);

(k) In the Tyrell case, Dr. Smith's findings, opinions and conclusions were supported by Dr. Mian (child abuse expert), Dr. Becker (neuropathologist) and Dr. Levin (ophthalmologist).

(l) In the Kasandra case, Dr. Smith's findings, opinions and conclusions were supported by Drs. Kobayashi and Micowitz (neurologists), Drs. Bunic and Chow (ophthalmologists) and Dr. Bohn (intensivist).

1028. To conclude that Dr. Smith was solely responsible for the medical evidence that supported the arrest, detention, prosecution and/or conviction of any of the caregivers investigated for these children's deaths is patently false in the face of the evidence that other medical experts expressed similar opinions to Dr. Smith as to the cause, mechanism and/or manner of death of these children.

1029. Furthermore, it would also be erroneous to conclude that medical evidence alone motivated the arrest, detention, prosecution and/or conviction of these individuals. Instead, in all of the criminal investigations, the responsible police forces considered and relied upon other, non-medical evidence in making determinations regarding the administration of justice.

1030. Similarly, the evidence relied on by the Crown to advance the prosecution and the strategies adopted in respect thereof were informed by more than simply the medical evidence.

1031. Moreover, in certain cases the strategies adopted by the defence were driven by factors other than the medical evidence. This is demonstrated by looking at the twelve cases in which convictions were entered:

(a) In at least seven cases, a pathologist was retained to assist in the defence of the accused (Kenneth, Valin, Baby M, Tamara, Gaurov, Joshua, Tiffani);

(i) In only two of these cases did the matters proceed to trial (Valin and Kenneth). In the Kenneth case, the defence pathologist was not even called to testify. In the Valin case, the defence pathologists gave opinions that variously supported the prosecution; and

(ii) In the remaining five cases, the accused pleaded guilty to a criminal offence.

(b) In five cases, there is no known involvement of a pathologist retained by the defence (Baby F, Delaney, Dustin, Kasandra and Paolo);

(i) Two of these cases (Paolo and Delaney) went to trial but no defence pathologist was called as a witness, presumably because the pathology evidence was not considered controversial; and

(ii) In the Baby F case, the accused was advised to seek the assistance of a defence pathologist but apparently elected not to do so.

1032. Succinctly, the various participants of the criminal justice system are inextricably connected and it is impossible to fairly judge any one participant in isolation or to attribute a particular outcome to the actions of any one participant.

1033. Having regard to the state of medical knowledge at the time Dr. Smith rendered his opinions and the manner in which pediatric forensic pathology was practiced in Ontario at that time, the evidence of the forensic pathologists who testified at the Commission supports the conclusion that Dr. Smith did not make any significant pathological error in fourteen of the nineteen cases (Amber, Baby F, Baby M, Katharina, Jenna, Tiffani, Tamara, Kenneth, Delaney, Dustin, Taylor, Gaurov, Tyrell and Kasandra).

1034. His pathology errors in the remaining five cases (Valin, Sharon, Paolo, Joshua and Nicholas) had varying implications to the death investigation. Moreover, in three of these cases (Valin, Sharon and Joshua), the pathology errors made by Dr. Smith were also made by other pathologists.

1035. Dr. Smith is similarly accused of having made testimonial errors in fifteen of the nineteen cases. Many of these testimonial errors arose from the adversarial nature of the criminal justice system, the absence of formal testimonial training and preparation of expert witnesses and a culture which permitted more expansive testimony. In five cases (Sharon, Jenna, Amber, Tyrell and Kasandra), Dr. Smith gave evidence that was confusing, unscientific or overly dogmatic, but this too can be understood by the culture at the time the testimony was given. The vast majority of the remaining criticisms can be attributed to the alleged pathology errors, many of which have been shown to be reasonable at that time they were given.

1036. Simply because Dr. Smith made mistakes in his pathology in five cases (out of more than 1000), gave evidence that was erroneous or strayed beyond his expertise in five cases and acknowledged contributing to delay and/or misplaced evidence in certain cases, does not support a conclusion that he intended to impede the justice system. To the contrary, in light of the undeniably challenging nature of pediatric forensic pathology, the absence of sufficient training and oversight

and his undisputed commitment to his work, it would be unfair to Dr. Smith to conclude that he alone was responsible for any alleged miscarriages of justice.

ALL OF WHICH IS RESPECTFULLY SUBMITTED,

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SCHEDULE "A"
LIST OF REFERENCES