

**OPPORTUNITIES FOR EXCLUDING  
EXPERT EVIDENCE**

**Chesley F. Crosbie, Q.C.  
Ches Crosbie Barristers**

**November, 2004**

## **Introduction**

The best defence expert evidence is the evidence the trial court never hears.

The Supreme Court of Canada has forged for trial counsel a set of tools for the exclusion of suspect evidence. These tools are yet underemployed and undervalued by trial courts and counsel alike. The author intended to present a paper which outlined the law surrounding the trial court's gatekeeping function, and which suggested some points of attack on the admissibility of two stalwart standbys of the defence stable of experts, the defence medical examiner and the defence accident reconstructionist. The fashioning of a proper paper for a learned colloquium has been overtaken by six weeks of trial which continues at the date of presentation.

The attached Brief and evidence excerpts are offered in the belief that they may help colleagues in obtaining the exclusion of confounding expert evidence, and thereby in assisting the court in the efficient search for truth. Accident reconstruction/crash injury reconstruction are fields of expertise particularly plagued by amateurs, charlatans and quacks. The transcript of the qualification voir dire may help distinguish the genuine reconstruction expert from the junk scientist.

I include only the direct examination of the plaintiff's reconstruction expert's qualifications. This occupied 15 minutes. The defence cross-examination of the expert on his qualifications unproductively occupied one hour and 15 minutes. At the end, the court accepted expertise in the proffered areas of motor vehicle accident reconstruction, motor vehicle crash injury reconstruction, human factors in car crashes, slow speed crashes, and accident investigation.

My oral presentation will also address some strategic considerations inherent in any decision to engage the court's gatekeeper role – the role of excluding expert evidence.

## TABLE OF CONTENTS

	<u>Page</u>
Reception Based on Cost vs. Benefit.....	1
Evidence Requiring Special Scrutiny .....	3
Limits to Trial Court Discretion .....	5
Expert to be Independent and Objective.....	6
Summary of Gatekeeping Role.....	8
Requirements for Admission of Medical Opinion.....	9
Dr. Lloyd – Medical Opinion.....	10
Dr. Smith – Medical Opinion.....	12
Dr. Smith – Accident and Crash Injury Reconstruction Opinion .....	13
Mr. Shirer – Accident Reconstruction Opinion .....	16
Appendix A – Authorities Cited	
Appendix B – Transcript of Qualifications of Accident Reconstruction Expert	

1. Logically relevant evidence is evidence that tends to make some fact-in-issue more or less probable. But logical relevance alone does not determine admissibility.
2. The Supreme Court of Canada has followed the lead of the Supreme Court of the United States in initiating a seismic shift in judicial attitudes to the admissibility of opinion evidence. Trial courts are now directed to exercise a gatekeeper role, and excess of discretion in admitting opinion evidence will result in legal error and potential reversal.

### **Reception Based on Cost vs. Benefit**

3. The Supreme Court of Canada has required that logically relevant evidence be subjected to a **cost-benefit analysis** to determine the effect reception of the evidence may have on the trial process. Thus in *R. v. J.-L.J.*, 2000 SCC 51, para. 47, Binnie J. stated:

“Thus the **criteria for reception are relevance, reliability and necessity measured against the counterweights of consumption of time, prejudice and confusion...** Whether considered as an aspect of relevance or a general exclusionary rule, “[t]he reliability versus effect factor has special significance in assessing the admissibility of expert evidence” (*Mohan*, et p. 21).” [Emphasis added]

[Tab 1]

4. In *R. v. D.D.*, 2000 SCC 43, para. 52, Major J. recalled that historically, experts were called as friends of the court, and neutrality was assured. Neutrality may now be the exception:

“This notion has long disappeared and now the “professional expert witness” has emerged. Although not biased in a dishonest sense, these witnesses frequently move from the impartiality generally associated with professionals to advocates in the case. In some notable instances, it has been recognized that this lack of independence and impartiality can contribute to miscarriages of justice.”

[Tab 2]

5. Canadian courts are now required to measure proffered expert testimony against criteria set by the Supreme Court of Canada and to exclude this evidence if it fails to meet the threshold for admission.
6. Although the highest court has developed the reliability and necessity tests in the context of novel scientific theory or technique, qualified expert evidence may be excluded for unreliability on grounds that the expert lacks the necessary independence and objectivity, even though novel science is not involved.
7. In the circumstances of this case, the criteria for admissibility must be applied to a relatively old and usually unchallenged field of knowledge – modern medicine – and to relatively new fields – accident and crash injury reconstruction.
8. *R. v. Mohan*, [1994] 2 S.C.J. No. 36 discussed the test for admitting opinion evidence, and moved in the direction of the “reliable foundation” test recently developed in United States jurisprudence. This analysis was further developed in *J.-L.J.*

[Tab 3]

9. The *Mohan* court was concerned that trial was becoming “a contest of the experts with the trier of fact acting as a referee in deciding which expert to accept” (p. 21), and required that opinion evidence be **relevant** to a fact-in-issue in the case, **necessary**, and proffered by an expert who is properly **qualified** to give the opinion.
10. In *R. v. D.D.*, 2000 S.C.C. 43, para. 56, the court lamented that:

“Modern litigation has introduced a proliferation of expert opinions of questionable value. The significance of the costs to the parties and the resulting strain upon judicial resources cannot be overstated.”

[Tab 2]

11. The hazards of the burgeoning expert witness industry prompted the court to stress the gatekeeping role of the trial judge in *J.-L.J.*, para. 28:

“In the course of *Mohan* and other judgments, the Court has emphasized that the trial judge should take seriously the role of “gatekeeper”. **The admissibility of the expert evidence should be scrutinized at the time it is proffered, and not allowed too easy an entry on the basis that all of the frailties could go at the end of the day to weight rather than admissibility.**” [Emphasis added]

[Tab 1]

12. The court acknowledged the essential role of the expert witness, but warned at para. 25:

“However, the dramatic growth in the frequency with which they have been called upon in recent years has led to ongoing debate about suitable controls on their participation, precautions to exclude “junk science”, and the need to preserve and protect the role of the trier of fact-- the judge or the jury.”

[Tab 1]

13. The court echoed *Mohan* and added:

“Too liberal an approach could result in a trial’s becoming nothing more than a contest of experts with the trier of fact acting as referee in deciding which expert to accept.”

[Tab 1]

### **Evidence Requiring Special Scrutiny**

14. In *J.-L.J.*, the Supreme Court of Canada confirmed that certain factors would raise the bar for admission of evidence:

“[E]xpert evidence which advances a novel scientific theory or technique is subjected to special scrutiny to determine whether it meets a basic threshold of reliability and whether it is essential in the sense that the trier of fact will be unable

to come to a satisfactory conclusion without the assistance of the expert.” [para. 35]

[Tab 1]

15. But novelty was not the only reason to subject expert evidence to special scrutiny. At para. 37, Binnie J. wrote:

“The **closeness of his opinion to the ultimate issue is another reason for special scrutiny**, as mentioned by Sopinka J. in *Mohan*, at p. 25:

The closer the evidence approaches an opinion on an ultimate issue, the stricter the application of this principle.” [Emphasis added]

[Tab 1]

16. The *J.-L.J.* decision para. 33 expressly adopted the U.S. Supreme Court’s *Daubert* approach and listed some factors which assist in judging the reliability of novel science:

- (a) Whether the theory or technique has been tested;
- (b) The known potential rate of error or the existence of standards;
- (c) Whether the theory has been subject to peer review and publication or is generally accepted.

17. *J.-L.J.* has reinforced the requirement for an admissibility analysis in Canada, which it considered under the following eight headings, for “ease of exposition”:

1. Subject Matter of the Inquiry
2. Novel Scientific Theory or Technique
3. Approaching the Ultimate Issue
4. The Absence of Any Exclusionary Rule
5. A Properly Qualified Expert
6. Relevance of the Proposed Testimony
7. Necessity in Assisting the Trier of Fact
8. The Discretion of the Trial Judge.

18. In establishing a test similar to that set out in *Daubert*, the Supreme Court of Canada has radically restricted the trial courts' discretion to admit into evidence dubious opinions. Heretofore, trial courts have done so on the rationale that the weight to be given to the opinions could be assessed later. This relaxed approach is no longer allowed.

### **Limits to Trial Court Discretion**

19. The test for admission of expert evidence exists independently of the discretion of the trial court. In *R. v. D.D.*, 2000 SCC 43, para. 47, it was stated that “[s]ome degree of deference is owed to the trial judge’s discretionary determination” of admissibility, “but that discretion cannot be used erroneously to dilute the requirement of necessity”.
20. The expert evidence called in *D.D.* merely reflected the current state of law, ie. the doctrine of recent complaint no longer existed. An instruction to the jury would have sufficed. The evidence was unnecessary and therefore inadmissible.
21. Factual findings influenced by the improper admission of unreliable opinion evidence will now be subject to review on appeal, and may constitute reversible error. The trial judge has a discretion in this connection, but only “some degree of deference is owed”: *D.D.*, para. 47.
22. *Mohan* and *J.-L.J.* focused on the special scrutiny to be accorded novel scientific theories or techniques before reception into evidence, but also warned of the higher threshold faced by opinions which approach the ultimate issue. Expert evidence may also be excluded for lacking objectivity and independence, the dangers of which were emphasized in *D.D.*

### **Expert to be Independent and Objective**

23. The justification for permitting the proffer of expert evidence is that it enables the court to exercise its own independent and informed judgment: *J.-L.J.* para. 56. If the proffered expert, even though qualified, lacks independence and objectivity, then the costs of receiving the evidence may outweigh the benefits.
24. The hallmarks of a worthy expert witness have been set out in *The Ikarian Reefer*, [1993] Lloyd's Law Reports 68 [Q.B.(Com.Ct.)] at pp. 81-82, and the following summary has been accepted by Canadian courts:

“The duties and responsibilities of expert witnesses in civil cases include the following:

1. Expert evidence presented to the Court should be, and should be seen to be, the independent product of the expert uninfluenced as to form or content by the exigencies of litigation...
2. An expert witness should provide independent assistance to the Court by way of objective unbiased opinion in relation to matters within his expertise... An expert witness in the High Court should never assume the role of an advocate.
3. An expert witness should state the facts or assumptions upon which his opinion is based. He should not omit to consider material facts which could detract from his concluded opinion...
4. An expert witness should make it clear when a particular question or issue falls outside his expertise.
5. If an expert's opinion is not properly researched because he considers that insufficient data is available, then this must be stated with an indication that the opinion is no more than a provisional one... In cases where an expert witness who has prepared a report could not assert that the report contained the truth, the whole truth and nothing but the truth without some qualification, that qualification should be stated in the report...

6. If, after exchange of reports, an expert witness changes his view on a material matter having read the other side's expert report or for any other reason, such change of view should be communicated (through legal representatives) to the other side without delay and when appropriate to the Court.

7. Where expert evidence refers to photographs, plans, calculations, analyses, measurements, survey reports or other similar documents, these must be provided to the opposite party at the same time as the exchange of reports..."

[Tab 4]

25. Orsborn J. referred to these duties in *McNamara Construction Co. v. Newfoundland Transshipment Ltd.*, 2000 CarswellNfld 402 (Nfld. T.D.), para. 5 and stated "I endorse these sentiments."

[Tab 5]

26. More recently, the statement of responsibilities contained in *The Ikarian Reefer* was summarized and endorsed in *Merck & Co. v. Apotex Inc.*, 2004 CarswellNat 1014, para. 16:

"It must be remembered that an expert who appears as a witness is not a "hired gun" of the party paying for his or her professional services. The duties and responsibilities of the expert witness were well set out by Cresswell J. in ("*the Ikarian Reefer*").... He said, based on well established authority, which has survived its transatlantic voyage unscathed, expert evidence presented to the Court should be, and should be seen to be, an independent product of the expert uninfluenced as to form or content by the exigencies of litigation. The expert witness should provide independent assistance to the Court by way of objective unbiased opinion in relation to matters within his or her expertise (pg. 81)."

[Tab 6]

27. In *J.-L.J.*, the Supreme Court of Canada considered that, even had the expert provided a better explanation of his data, his evidence could still be excluded for lack of independence [para. 59]:

“...there remained the question of whether Dr. Beltrami’s contribution to the judge’s ability to form his “own **independent** conclusion” on the issue of the respondent’s exclusion was worth the cost in potential distortion of the judge’s **independent** consideration of the evidence....”

[Tab 1]

28. The grave danger, recognized by the Court in *D.D.*, is that “lack of independence and impartiality can lead to miscarriages of justice”: para. 52.

### **Summary of Gatekeeping Role**

29. To summarize, the courts have a gatekeeping function with regard to expert evidence. Expert evidence may be excluded on the basis of one or several independent grounds. The expert must be properly qualified to give the opinion. The evidence must pass the *Mohan* criteria of relevance and necessity. Evidence which advances a novel scientific theory or technique, or which approaches the ultimate issue, is subjected to special scrutiny. If expert evidence lacks independence and objectivity, then it will not assist the court in arriving at its own independent conclusion, and should be excluded. The test in all cases is whether the benefit of the evidence is worth the cost. The decision whether to admit or exclude is a discretionary one, and will be accorded some deference by appeal courts.
30. Several of these principles can be seen at play in *Homolka v. Harris*, 2002 CarswellBC 821 (B.C.C.A.). Expert evidence had been admitted at trial from “a professional engineer specializing in accident reconstruction”. The Court of Appeal stated obiter that it was willing to accept that a metallurgical engineer was qualified to opine on the magnitude of collision forces between vehicles. The court was unwilling to accept that the engineer

was qualified to opine on the physiological effect upon an occupant of the application of force (occupant kinematics and biomechanics): para. 8. The basic rule for exclusion in civil as in criminal cases was the same.

[Tab 7]

31. In *Homolka*, the accident reconstruction evidence of the engineer was held inadmissible for offending both the relevance and the necessity criteria in *Mohan*. A new trial was ordered.
32. *Homolka* stands in a line of cases from British Columbia where, it would appear, courts have been plagued by defence-oriented opinion evidence in car crash cases which has taken on more the character of advocacy than of impartial assistance: *Laflamme v. Stevens*, 1991 CarswellBC 1806 (B.C.S.C.) [Tab 8]; *Sadowski v. Stevens*, 1992 CarswellBC 2318 (B.C.S.C.) [Tab 9]; *Rai v. Wilson*, 1999 CarswellBC 541 (B.C.C.A.) [Tab 10]; *Gabriel v. Thompson*, [1995] B.C.J. No. 2832 (B.C.P.C.) [Tab 11]; *Parish v. Scott*, 1996 CarswellBC 2970 (B.C.S.C.) [Tab 12]; *Gee v. Elvira*, 2001 CarswellBC 1856 (B.C.S.C.) [Tab 13]; and *Walsh v. Belcourt*, 2004 CarswellBC 776 (B.C.S.C.) [Tab 14].

### **Requirements for Admission of Medical Opinion**

33. The long established methodology for arriving at a correct medical diagnosis is *differential diagnosis*. This process is described in Harrison's Principles of Internal Medicine, p. 3 (E. Braunwald et al. Eds., 15<sup>th</sup> Ed. 2001) in a passage adopted by Dr. Goodridge as authoritative, in the following way:

“Formulating a differential diagnosis requires not only a broad knowledge base but also the ability to assess the relative probabilities of various diseases and to understand the significance of missing diagnoses that may be less likely. **Arriving at a diagnosis requires the application of the scientific method.** Hypotheses are formed, data are collected, and objective conclusions are reached concerning whether to accept or reject a particular diagnosis. Analysis of the differential diagnosis is an

iterative process. As new information or test results are acquired, the group of disease processes being considered can be contracted or expanded appropriately....As described below, **medical decision-making should be evidence-based**, thereby ensuring that patients derive the full benefit of the scientific knowledge available to physicians.” [Emphasis added]

[Tab 15]

34. A medical witness should be required to demonstrate and defend adherence to accepted scientific methodology, no less than any other expert who purports to apply science. The days are gone when courts would hear medical evidence based merely on the authority of membership in a respected profession, on the personal authority of a credentialed witness, or on the witness’ claim to clinical acumen derived from experience.

### **Dr. Lloyd – Medical Opinion**

35. In Ogilvie-Harris and Lloyd, Personal Injury: A Medico-Legal Guide to the Spine and Limbs, 2d ed., (1999) the authors state at p. 5 that:

“The objective of a medico-legal report is to produce an impartial document which may be used as testimony when the court requires an expert opinion.”

[Tab 16]

36. At p. 9 the authors add that:

“After completing the history and physical examination, the reporting physician should note the results of the investigations available, and then, by reviewing the history, the physical examination and the investigations, **arrive at a diagnosis.**” [Emphasis added]

[Tab 16]

37. They state further down the page that:

“The diagnosis should be stated in terms of the anatomical location and the nature of the disease or injury process. In the report it is also very useful to have the examining physician note a “confidence factor”.”

[Tab 16]

38. The Second Defendant’s medical examiner is the same Dr. G. J. Lloyd who authored the above text. Dr. Lloyd prepared a medico-legal report, but did not state a final diagnosis. He did not suggest any further investigation helpful in arriving at a diagnosis. He simply did not provide one.
39. The Plaintiff submits that Dr. Lloyd did not follow the accepted scientific method, namely differential diagnosis, nor did he arrive at a diagnosis, which the reporting physician should do, according to Dr. Lloyd’s own book. According to Dr. Fehlings, if Dr. Lloyd’s report were peer-reviewed as a consulting report, he would have trouble getting paid for it. His evidence fails the tests of reliability and necessity, and is not worth the cost in time, prejudice and confusion.
40. Dr. Lloyd says that while the Plaintiff has abnormalities of the thoracic spine, these are not responsible for her condition of relative disability. Dr. Lloyd puts forward the opinion that the plaintiff’s spinal surgery was unnecessary and did not improve her. This news is highly surprising to both the Plaintiff and her spinal neurosurgeon, Dr. Fehlings.
41. In addition, Dr. Lloyd told the Plaintiff during the examination that he did not want to hear about the history of back pain as it affected her work during the fall of 1993 immediately after the September 8 accident, or about her reasons for purchasing the ultra light two piece lead coat in January 1994. This is potentially crucial history which supports the arising of back symptoms soon after the accident and which assists in drawing a temporal causal link.

42. This is not merely deficient history-taking which goes to weight. By intentionally refusing to receive this history, Dr. Lloyd manifested sufficient bias, viewed in the light of his failure to diagnose and his extreme opinion on lack of indication for surgery, as to render his evidence too lacking in independence and objectivity to meet the reliability test.
43. A further ground of objection to Dr. Lloyd's evidence is that he has reached conclusions by assuming as a material fact that the Plaintiff experienced no relevant symptoms immediately after the ditch accident and through the following 6 or 8 months – a material fact not supported by the evidence.
44. In addition, Dr. Lloyd's evidence is unnecessary. Dr. King, also a defence medical examiner, has prepared a comprehensive report.
45. By failing to apply appropriate methodology and deliberately excluding important information from his history taking, and by failing to achieve the purpose of an independent medical examination and arrive at a diagnosis, Dr. Lloyd has rendered his opinion so subject to error, and so suspect for bias, as to render the cost of admitting it greater than the benefit of receiving it.

### **Dr. Smith – Medical Opinion**

46. Dr. Smith, a radiologist and Ph.D. engineer, was retained by both defendants, to give both an accident and crash injury reconstruction opinion, and a medical opinion. We will first focus on the medical opinion.
47. Dr. Smith has not examined the Plaintiff or taken her history, and has not developed a comprehensive differential diagnosis, or a diagnosis. Harrison's, cited above, states: "Arriving at a diagnosis required the application of the scientific method." Nothing in the nature of accepted diagnostic methodology has been followed by Dr. Smith.

48. Dr. Smith's so-called medical opinion is, by his own admission, not a diagnosis. It is a potential diagnosis, a diagnostic candidate in the differential diagnosis, which possibility he opines the Plaintiff's physicians might further consider.
49. Dr. Smith has not qualified himself to give a diagnostic opinion, and does not claim to do so. He claims only to advance a possible diagnosis, not a probable diagnosis. As such his opinion does not satisfy the cost-benefit equation and is a waste of the court's time. It should not be admitted.

### **Dr. Smith – Accident and Crash Reconstruction Opinion**

50. Dr. Smith wishes to utilize formulas of applied physics to prove that because the Plaintiff's vehicle sustained no undercarriage damage from scraping the ditch edge as it entered the ditch, the ditch was very shallow.
51. Dr. Smith admits that his reconstruction analysis is founded on nothing more than a knowledge of undergraduate physics. He has no accreditation from any of the recognized centres of learning and teaching in the field of accident or crash reconstruction. He is unqualified to give an opinion admissible in court in the fields of accident reconstruction or crash injury reconstruction.
52. Furthermore, Dr. Smith's original report was based on drop analysis rather than "vault" analysis. This is an obvious error in methodology, in view of the admitted fact that the Plaintiff's vehicle exhibited a component of horizontal motion when it entered the ditch. It was moving in a forward direction.
53. The failure to allow for a component of horizontal motion totally invalidates any conclusions Dr. Smith drew from his calculations. This is similar to the situation in *Smithers v. C&G Custom Module Hauling et al.*, Case no. 3:99CV633 (E.D.Va. 1999), p. 9, a motor vehicle case in which the plaintiff presented testimony from an acknowledged

expert in the area of accident reconstruction whose qualifications were accepted. The court found that:

“[T]he application of the methodology used by Chewning results in the impossible conclusion that the plaintiff vehicle was going faster after the impact than the defendant vehicle. . . . [I]t typifies Chewning’s analysis which is best described as a patchwork of unreliable estimations blended with what is otherwise accepted science.”

[Tab 17]

54. At page 10, the court observed:

“Granted, testing is not normally available to reproduce an accident scenario and an expert must therefore apply various accepted principles which can involve, for example, the legitimate technique of extrapolation. Moreover, many objections to proposed expert opinion “go to weight and not admissibility” so that the import, if any, should be determined by the fact finder.... However, in its required role as “gatekeeper”, this Court feels obliged ‘to draw the line’ at which it has decided, based on the evidence and arguments presented, to be the point of such unreliability that the expert’s opinion is rendered unlikely to assist the fact finder in any meaningful way.”

[Tab 18]

55. In a recent Newfoundland case arising out of the collapse of the front fork of a bicycle, the plaintiff’s expert was accepted as qualified in the field of metallurgical engineering, physical metallurgy, and the general principles of design of metal products, but was not qualified as an expert in design of bicycles (para. 6), or in accident reconstruction (para. 24). Portions of his report were accordingly excluded: *Rowe v. Sears Canada Inc.*, 2004 CarswellNfld 176 (Hall J.).

[Tab 19]

56. An Ontario court explicitly accepted the gatekeeping role and excluded all of the evidence of a psychologist, after applying a cost-benefit analysis, in *Johnstone v. Brighton*, 2004 CarswellOnt 3229 (Ont. S.C.J.), stating:

“15. After weighing even the marginal benefit that Dr. Jaffe’s evidence may offer, together with a court’s natural inclination to hear all (or as much) evidence as counsel decide to present, against the impact of further financial cost to the parties, more delay, and the expansion of an already over-long trial ... this “gatekeeper” rules that Dr. Jaffe’s potential evidence is inadmissible.”

[Tab 20]

57. The Court expressly relied on the judgment in *J.-L.J.* to reject the suggestion that the evidence be admitted and its weight determined later.
58. In *Wilson v. Woods* (1999), U.S.C.A. (5<sup>th</sup>), a mechanical engineer’s exclusion, for lack of qualification, from giving accident reconstruction evidence, was upheld, with the Court of Appeal stating that the engineer’s “expertise” in accident reconstruction was no greater than that of any other individual with a general scientific background.”

[Tab 21]

59. In *Salerno v. Tudor* 2002 Cal. App. Unpub. LEXIS 4411 a biomechanical engineer testified the plaintiff could not have sustained the injury complained of. The court ruled that this was an ultimate issue and the expert was not qualified to give this opinion.

[Tab 22]

60. Dr. Smith also seeks to render opinion, of a crash injury reconstruction or “biomechanical” nature, that the injury causing potential of driving into the ditch was no different than that experienced in everyday life, and that the ditch accident could not have caused the injuries claimed.

61. This is evidence which Dr. Smith is not credentialed to give. It also violates the principle that while a properly credentialed crash injury reconstructionist may identify the presence of potential injury causing mechanisms, it is the exclusive purview of the medical diagnostician to state whether these mechanisms resulted in injury, as a question of fact (with the final determination being reserved, of course, to the Court).
62. An opinion that a given accident could not cause a given injury, also is an opinion on the ultimate issue of whether the ditch caused or contributed to the Plaintiff's personal injuries. As stated by Binnie, J. in *J.-L.J.*:

“The closeness of his opinion to the ultimate issue is another reason for special scrutiny....”

[Tab 1]

63. For reasons of lack of credentials, departure from accepted methodology, manifest bias, and decision of the ultimate issue, Dr. Smith's opinions in accident reconstruction and crash injury reconstruction should not be received.

### **Mr. Shirer – Accident Reconstruction Opinion**

64. Mr. Shirer displays only one obvious relevant credential in the field of accident reconstruction, from the University of North Florida in 1992. In this fast-developing field of applied science, such light credentialing is already 14 years out of date.
65. Mr. Shirer displays no credentialing in photogrammetry. He is in fact, a person with a chemical engineering degree, who has chosen not to fully commit himself professionally either to accident reconstruction or to engineering. He does fire investigation.
66. Numerous U.S. courts and the British Columbia Court of Appeal in *Homolka* have rejected the notion that a professional engineer, without specific training, should be recognized as a professional accident reconstructionist or crash injury reconstructionist.

67. The Shirer opinion should be excluded for the same reasons as the Smith opinion: lack of credentials, departure from accepted methodology, manifest bias, and decision of the ultimate issue (which requires special scrutiny).
68. In the Plaintiff's respectful submission, all the impugned opinion testimony fails the test stated by Binnie, J. in *J.-L.J.* above:

“Thus the criteria for reception are relevance, reliability and necessity measured against the counterweights of consumption of time, prejudice and confusion....”

[Tab 1]

**RESPECTFULLY SUBMITTED** this 10<sup>th</sup> day of November, 2004.

---

CHESLEY F. CROSBIE, Q.C.  
CHES CROSBIE BARRISTERS  
Solicitors for the Plaintiff  
169 Water Street, 4<sup>th</sup> Floor  
St. John's, NL A1C 1B1

**APPENDIX A – AUTHORITIES CITED****Tab**

- 1 *R. v. J.-L.J.*, 2000 SCC 51
- 2 *R. v. D.D.*, 2000 SCC 43
- 3 *R. v. Mohan*, [1994] 2 S.C.J. No. 36
- 4 *The Ikarian Reefer*, [1993] Vol. 2 Lloyd's Law Reports 68 [Q.B.(Com.Ct.)]
- 5 *McNamara Construction Co. v. Newfoundland Transshipment Ltd.*, 2000 CarswellNfld 402 (Nfld. T.D.)
- 6 *Merck & Co. v. Apotex Inc.*, 2004 CarswellNat 1014
- 7 *Homolka v. Harris*, 2002 CarswellBC 821 (B.C.C.A.)
- 8 *Laflamme v. Stevens*, 1991 CarswellBC 1806 (B.C.S.C.)
- 9 *Sadowski v. Stevens*, 1992 CarswellBC 2318 (B.C.S.C.)
- 10 *Rai v. Wilson*, 1999 CarswellBC 541 (B.C.C.A.)
- 11 *Gabriel v. Thompson*, [1995] B.C.J. No. 2832 (B.C.P.C.)
- 12 *Parish v. Scott*, 1996 CarswellBC 2970 (B.C.S.C.)
- 13 *Gee v. Elvira*, 2001 CarswellBC 1856 (B.C.S.C.)
- 14 *Walsh v. Belcourt*, 2004 CarswellBC 776 (B.C.S.C.)
- 15 Harrison's Principles of Internal Medicine, p. 3 (E. Braunwald et al. Eds., 15<sup>th</sup> Ed. 2001)
- 16 Ogilvie-Harris and Lloyd, Personal Injury: A Medico-Legal Guide to the Spine and Limbs, 2d ed., (1999), pp. 5, 9.
- 17 *Smithers v. C&G Custom Module Hauling et al.*, Case no. 3:99CV633 (E.D.Va. 1999)
- 18 *Rowe v. Sears Canada Inc.*, 2004 CarswellNfld 176 (Hall J.)
- 19 *Johnstone v. Brighton*, 2004 CarswellOnt 3229 (Ont. S.C.J.)
- 20 *Wilson v. Woods* (1999), U.S.C.A. (5<sup>th</sup>)
- 21 *Salerno v. Tudor* 2002 Cal. App. Unpub. LEXIS 4411