

IFA Involvement in Personal Injury Claims

Research Project for Emerging Issues/Advanced Topics Course

Diploma in Investigative and Forensic Accounting Program

University of Toronto

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Table A –Team Experts / Lawyer Roles In Personal Injury Claims

1.0 Introduction and Objectives

The objective of civil personal injury tort cases is to award damages that would fully compensate the plaintiff for losses suffered the consequence of an act of the defendant. The Investigative Forensic Accountant's (IFA) role in these claims is to assist the trier of fact, the judge or the jury. The primary objective of this paper is to provide the IFA and the DIFA student guidance on the flow of personal injury claims. First I will outline the basics of awarding damages based on the book written by Bruce, Christopher J. *Assessment of Personal Injury Damages, Fourth Edition*. Markham. LexisNexis, Butterworths, 2004, and then I will list Bruce's suggested questions for the development of evidence and conclude with specific recent case examples that highlight the emerging issues. The emerging issues are discussed in the exact words of the judge to show how he deals with the expert witness testimony and jurisprudence.

The utilization of statistics by various experts and the judges will be discussed. First do the people quoting the statistics have the proper depth of understanding from education or experience to apply the statistics to the case specific facts?

Next I discuss what has happened to the Insurance Industry over the last five years and how that has affected the volume of work assigned and cost pressures on court experts such as Forensic Accountants. How do we as

IFAs increase our profile for personal injury work and how can we maintain quality work while the cost constraints are so great?

Emphasis will be put on how we as IFAs can simplify (issue objective reports that are easier to understand, thorough, comprehensive, fair) and speed up the process as well as reduce the accounting costs. We should develop a methodology that can be entered into a dynamic template on the Internet for the loss of income calculations.

Presently there is no legislated requirement for the opposing experts to agree or disagree on some loss calculation issues but it often occurs at mandatory mediation or arbitration before a trial. This paper will attempt to show that if the opposing experts were required to privately meet to sort out their differences claims will settle earlier and be less costly.

“There are a number of players on a successful litigation team, each with particular skills and roles.”¹ This paper will examine the roles of experts in personal injury claims with emphasis on how to reduce costs. Lawyers, IFAs and other experts get together early after the accident to plan strategy and control costs. The case that drags on due to inefficiencies becomes costly.

¹ Smith, Ronald. “Accounting For Damages” 1993 page 21

2.0 Documents Reviewed and Relied Upon

For a detailed list of books, periodicals, literature, statutes, web sites and case decisions the alphabetical bibliography is listed here as well as in the bibliography section 13.0.

Paragraphs of case decisions were included in the detail findings section to illustrate how the judge opined the evidence, which included emerging issues.

Comments on the insurance industry were prepared from various Insurance industry articles and web sites.

Anderson, C with Bruce, Christopher. "Using family background to Predict Educational Attainment in Canada." *The Expert Witness Newsletter* Autumn 2004 Vol. 9, No. 3 Retrieved on July 17, 2005,

Angellotti, Nick. "Civil Court Procedures and Their Relevance to Expert Witnesses, Including Investigative and Forensic Accountants." *Diploma in Investigative and Forensic Accounting Program*, 2003

Bogoroch & Associates . "Bill 198 brings significant changes to automobile insurance claims." *Bogoroch & Associates*. Retrieved July 17, 2005, from <http://www.bogoroch.com/articles/lawyersweekly-bill198.phphttp>

Bogoroch & Associates . "INSURANCE ACT: Recent changes in a nutshell" Bogoroch & Associates. Retrieved July 17, 2005, from <http://www.bogoroch.com/newsletters/bogoroch-litigation-bulletin-jan2004.pdf>

Brown, Carla. "Alberta Civil Practise Note 10." *Brown Economic*. Retrieved July 17, 2005 from http://www.browneconomic.com/practise_note.html

Brown, C. "Checklists." *Brown Economic Consulting Inc.* Retrieved July 17, 2005 from <http://www.browneconomic.com/checklists.html>

Brown, Carla. "Economists & Actuaries in Civil Litigation: What does each Discipline offer?" *Brown Economic Consulting Inc.* Retrieved July 17, 2005 from <http://www.browneconomic.com/CBLEconomists%20andactuaries%20.pdf>

Bruce, Christopher J. *Assessment of Personal Injury Damages, Fourth Edition*. Markham. LexisNexis, Butterworths, 2004

Bruce, Christopher. "Consulting Services Below are links to lists of information we require in order to prepare our assessments". Retrieved on July 5, 2005, from <http://www.economica.ca/consult.html>.

Bruce, Christopher. "Forecasting the Rate of Growth of Real Wages (Productivity)" *The Expert Witness Newsletter Spring 2004 Vol. 9, No. 1* Retrieved July 17, 2005, from <http://www.economica.ca>

Bruce, Christopher. "The Reliability of Statistical Evidence Concerning the Impact of Disability." *The Expert Witness Newsletter Winter 2004/05 Vol. 9, No. 4*. Retrieved on July 17, 2005, from <http://www.economica.ca>

Bruce, Christopher. "The Impact of Disability on Earnings: Reliable Data." *The Expert Witness Newsletter Spring 2005 Vol. 10, No. 1*. Retrieved on July 5, 2005

Bruce, Christopher J. & Kerr, William A. "Estimating Farm Income to Determine Compensation in Death or Disability Cases." *The Journal of Agricultural Taxation and Law, Vol. 9, No. 3, Fall 1987 (Reprinted Spring 2004 www.economica.ca)*, 254-263. Retrieved July 17, 2005, from www.economica.ca

Canadian Insurance ENEWS November 15, 2004. "SETTLEMENT IN PERSONAL INJURY CASE BELIEVED LARGEST IN CANADIAN HISTORY." retrieved on June 10, 2005 from the <http://www.cdnins.com/gopher.php?>

Debenham, David. "Goodbye and Hello to the Company Accountant in the Courtroom: Expert Evidence in the Twenty-first Century." *THE Balance Sheet WINTER 2004* , Page 2-6

DIFA Litigation Support II –Advanced Topics. "LESSON IV DAMAGES SUFFERED BY INDIVIDUALS." Page 66-77

Di Salvo, Gaspare. "Compensation for Loss of a Fetus"

WP 9 Without Prejudice June 2005 Vol. 69 No. 10. Page 8-17

Durrani, Saqib. "Assessing the Loss of Income for a Self-Employed Claimant." *WP Without Prejudice March 2005 Vol. 69 No. 7*, Page 16-21

Off Web NexisLexis Personal Injury NetLetters, Butterworths Personal Injury NetLetter BPIN.

Insurance Act. Ontario Regulation 461/96 Amended to O. Reg. 381/03

Investigative and Forensic Accounting Interest Group. (1995)

Practise Aid 95, CICA An Introduction to Investigative and Forensic Accounting Practise Issues

Madras, Eva. "Future Care Cost Analysis: Assessing and Quantifying Future Needs." *Without Prejudice February 2005, Vol. 69, No. 6, Page 66-69*

Marcovitch, Daniel. "Future Pecuniary Damage Claims: Weapons of Mass Deception?" *Without Prejudice Vol. 69, No. 5, January 2005, Page 22-25*

Patterson Jack. Fellow Society of Actuaries, Toronto Canada provides an internet input method, Retrieved July 17, 2005, from <http://www.actuaryonline.com/brsteps.htm>

McLeish, "John A. Strategies for Maximizing Future Loss of Income." *** of Loopstra, Nixon & McLeish October 4-5, 1996 paragraph 75

NexisLexis Cases:

Arnold v. Teno, [1978], Andrews v. Grand & Toy Alberta Ltd, [1978] and Thornton v. Board of School Trustee of School District No. 57 (Prince George), [1978]

Colonna v. Mitchell (1997) paragraph 33

Hornick v. Kochinsky [2005] O.J. No. 1629
Shrump et al. v. Koot (1997) 18 O.R. (2D) 337 (Ont. CA)

Hornick v. Kochinsky [2005] O.J. No. 1629

Walker v. Ritchie [2003] O.J. No. 18 Original judgement
Walker v. Ritchie [2005] O.J. No. 1600 April 20, 2005 Appeal

NexisLexis Personal Injury NetLetters, Butterworths Personal Injury
NetLetter BPIN January 1, 2005 to July13,2005.

Patterson Jack. (2000). “WHY ARE INSTANTANEOUS REPORTS SUCH
GREAT NEGOTIATING TOOLS?” Retrieved July 17, 2005, from
<http://www.actuaryonline.com/whygreat.htm>

Revenue Canada's Interpretation Bulletin IT-365

Smith, Ronald. “Accounting for Damages” 1993 Chapters 1,2,3,5,6, & 7

Van Zyl, Sean. , “Auto Insurance: Will it Bite Back.” Canadian Underwriter
May 2005 Retrieved June 23, 2005

http://www.canadianunderwriter.ca/issues/Isarticle.asp?id=164249&story_id

3.0 Summary of Detailed Findings

The emerging issues discussed in the case specific examples and my
additional comments from industry articles included:

Lost years; gender specific wage statistics; economy wide wage growth statistics versus specific occupation growth statistics; evidence to support assumptions on proposed education attainment for the catastrophically injured student; fringe benefit percentage calculations; positive and negative contingencies; use of mortality tables; projected retirement ages; damages for loss of a fetus; loss of interdependent relationships; and various other uncertainties in quantifying income losses.

Experts and Judges often utilize statistics in personal injury claims but they neither have the training or experience to properly apply them to specific cases. Not everyone has the aptitude to analyse statistics and quote them appropriately. The statistics expert is usually a person with a masters or PHD who is involved in current research or is aware of the up to date studies in the specific field. The DIFA program would benefit from more in depth studies in statistics and how they are utilized in personal injury damage calculations. When critiquing, the opposing side experts report statistical assumptions the immediate concern is the source, validity, relevance and how current. I am not suggesting we are infringing on other experts territory but merely expanding the IFA statistical education to broaden our expertise and make our services more valuable to lawyers, insurance adjustors and the courts.

“The 2004 financial returns of Canadian insurers were boosted to unprecedented level of profitability by mainly a strong underwriting recovery in the notorious auto line. And the first quarter 2005 financial results of

companies suggest that auto business continues to offer a healthy operating margin.”² The property and casualty industry recovered from its recent weakest earnings in history. Premium reductions in Ontario are mainly due to the insurance act changes effective October 1, 2003 under bill 198 regulations (keeping the Promise for a Strong Economy Act). This act legislated new provisions for injured claimants that are summarized in Appendix A. This Act was intended to reduce personal injury claims by an estimated 15% because of the higher deductibles for non-pecuniary damages. The insurance companies were able to reduce insurance premiums charged by approximately 12% in 2004³. The full effect of this new legislation will not be fully understood until the automobile accidents dated on or after October 1, 2003 reach the courts. Some insurers in Ontario expect less demand for professionals such as IFAs, lawyers and health specialists on personal injury claims. The health experts will see the biggest reduction in demand due to the legislated changes. At the same time there is continuing pressure on hourly limits for various experts. The dilemmas are how do we as IFAs increase our profile for personal injury work and how can we maintain quality work while the cost constraints are so great? Chartered Accountant Investigative Forensic Accountants (CA IFAs) must maintain minimum standards as enforced by the CICA. We are the specialists in quantifying personal injury income losses, are court-qualified experts with the training,

² Van Zyl, Sean. , “Auto Insurance: Will it Bite Back.” *Canadian Underwriter* May 2005 Retrieved June 23, 2005 <http://www.canadainunderwriter.ca/issues.com>

³ Insurance Bureau of Canada. “A Stronger Healthier Insurance Industry.” *Insurance Bureau of Canada*. <http://www.ibc>. Retrieved June 23, 2005

credibility and financial experience, with years of experience in investigative and forensic accounting training. To cut costs I attempted to set up a computer template as discussed in the next paragraph and later examined how to cut costs by setting up the team of experts early in the life of the claim.

I attempted to set up mathematical models for personal injury calculations to reduce costs but each case is unique. In conclusion we cannot simplify personal injury calculations down to a number crunching exercise with data entry into an internet website as an actuary and an economist did as indicated in my detailed findings. The actual input into a dynamic spread sheet is secondary. It is better to set up a methodology similar to scientific theory. Each case requires professional accounting skills, investigation skills and an investigative mindset. In personal injury claims the IFA needs to understand the relevant insurance laws and regulations and the insurance policies or contract of insurance. The Highway Traffic Act, the Laws of evidence, Court procedures and the IFA must be able to document and present investigative findings for decision-making purposes by the courts, insurance companies, lawyers, mediators and arbitrators. The cost benefit of the quality approach, better facts and better assumptions should result in objective reports that the courts can understand and assess the damages. If we do the job right the first time that in itself should reduce the costs in the long on.

What the court expects of expert witness has evolved over time. The experts obtain the facts and compensation from the client but must balance that against the higher duty to the court to be objective. IFAs are objective, possess the education and training to be expert witnesses in loss quantification for personal injury claims.

Presently there is no legislated requirement for the opposing experts to agree or disagree on some loss calculation issues but it often occurs at mandatory mediation or arbitration before a trial. When the opposing experts are required to privately meet to sort out their differences claims will settle earlier and be less costly. There would be consensus on certain issues and a list of issues that they disagree on including dollar values. This is actually legislated in Australia and the United Kingdom as per Nick Angelotti's 1993 thesis "Civil Court Procedures and Their Relevance to Expert Witnesses, Including Investigative And Forensic Accountants." The dynamic template showing ranges of possible losses based on various logical assumptions is good for the plaintiff and defendant to clarify their position. Consequently there may be a pre-trial settlement or the expert testimony at trial would be reduced and the trial shorter and less costly.

"There are a number of players on a successful litigation team, each with particular skills and roles."⁴ The roles of the team of experts in a personal injury claim were examined in Table A of this paper. The personal injury claim team approach is best. An early team start with effective efficient

⁴ Smith, Ronald. "Accounting For Damages" page 21

planning will usually pay off in the long run to reduce time and costs. Since we are always judged based on our last case the team should always keep in mind quality, efficiency and be within the client's cost constraints if reasonable.

Detailed Findings Sections 4.0 through 10.0

4.0 Detailed Findings- Background

Burden of Proof of Damages

The plaintiff is required in civil actions to prove the existence and quantum of personal injury losses incurred prior to the trial date on the balance of probabilities. The burden of proof for future loss or damage has been based on a "reasonable chance".

In the Ontario Court of Appeal decision for *Shrump et al. v. Koot*⁵, the judge states:

"In this area of the law relating to the assessment of damages for physical injury, one must appreciate that though it may be necessary for the plaintiff to prove, on the balance of probabilities, that the tortious act or omission was the effective cause of the harm suffered, it is not necessary for him to prove, on the balance of probabilities, that future loss or damage will occur, but only that there is a reasonable chance such loss or damage occurring."

Calculation of Losses Due to Personal Injury

The theory regarding calculation of losses due to personal injury follows:

⁵ *Shrump et al. v. Koot* [1997] 18 O.R. (2D) 337 (Ont. CA)

One single lump-sum award of damages is made to compensate all losses to put the plaintiff in the same position but for the accident, both to the present and those expected in the future.

If the loss is difficult to calculate it does not mean there was no loss.

The compensation cannot be determined with absolute mathematical accuracy but should approximate the plaintiff's loss ("as near as possible"). There is no opportunity at some future date to say not enough money was awarded. There is only this one chance to make sure the plaintiff is adequately compensated.

In the case of fatalities, immediate family members may be awarded damages for losses because the deceased had previously provided monetary, physical and emotional support.

Personal injury cases can be a consequence of motor vehicle accidents, medical malpractice, slip and fall incidents, sports accidents etc. An actionable claim can be made within the legislated deadlines if the defendant is shown to be negligent in tort or under the criminal code. Automobile claims must be filed in court within 24 months of the accident. The main exception is a claim for a minor which may be filed up to his/ her 18th birthday.

The case law states:

“ 223 Meyer v. Bright [1993] O.J. No. 2446 remains the seminal case in Ontario in dealing with the meaning of the words in the limitation sections of the Insurance Act. The Ontario Court of Appeal held that the limiting words in the exemption should be given their ordinary and natural meaning. The onus is on a plaintiff as to whether he or she has satisfied, on balance, that he or she comes within one of the statutory exemptions. No case since Meyer has indicated that the regime in Bill 59 cases introduced any element not before the court in Meyer. The court in Meyer set out the three well known questions that need to be answered.

1. Has the injured person sustained permanent impairment of a physical, mental or psychological function?
2. If yes, is the function which is permanently impaired an important one?
3. If yes, is the impairment of the important function serious?”⁶

Heads of Damages

There are two basic approaches used in quantifying damages in personal injury cases:

The Capital asset or earning capacity approach which is used when an individual's career path was not established specifically for children, students and young women/ men who have chosen to raise a family / care for parents before going out to work. If a plaintiff has suffered a permanent disability then a capital asset is fully or proportionately lost. Certain vocations aspired to may no longer be an option but for the accident.

⁶ Hornick v. Kochinsky [2005] O.J. No. 1629

The Economic reality approach is based on the most probable career path a person might have followed but for the accident. The case specific historical employment records are examined. If these are not available then the court will examine actuarial, accounting, statistical or economic evidence. These methods are not mutually exclusive and a combination of the approaches may be most appropriate in given situations.

The four principal heads of damages that may arise in a personal injury case are:

Pecuniary

- special damages;
- cost of future care; and
- loss of future earnings.

Non-Pecuniary

- compensation of physical and/or mental pain and suffering;

Special Damages (Itemized Damages Prior to the Trial Date)

Special damages are income losses and out-of-pocket expenses that occur prior to the trial date. The historical documentation of what actually occurred is easy to scrutinize and compare to what might have been up to the trial date but for the accident.

Out-of-pocket Expenses

- cost of personal and nursing care and medical expenses;
- cost of special equipment (i.e. Braille personal computer; seeing eye dogs, veterinarian bills and their food; walkers, canes, wheelchairs etc);
- travel expenses such as cabs or disabled van pickups to medical appointments if the injured person can not drive and
- cost of housekeeping help, maintenance of home and yard if plaintiff can no longer complete tasks that were undertaken prior to the accident

Pre-trial Loss of Income

Special damages would include a calculation of the plaintiff's loss of income from the date of the accident to the projected trial date. We are calculating the difference in the income but for the accident versus the income actually earned.

Loss of Benefits

The examples include health care insurance; dental insurance; eye care insurance; drug plans; life insurance; automobile; employee discounts and clothing allowances.

The best approach to quantify these benefits is to request the costs incurred by the actual employer who previously provided these benefits. If this is not

possible then we calculate the cost to purchase the benefit directly from an insurance company / outside provider. There are also generally accepted percentages for government and military employees.

Compensation for Physical or Mental Pain and Suffering

A lawyer generally deals with the dollar figure claimed. The judge or jury assesses damage awards for this head of damages limited by the “trilogy”⁷ cases heard in 1977.

“Further the Supreme Court of Canada has established that there is to be a ceiling on these “non-pecuniary” damages of \$ 100,000 measured in “January 1978 dollars”. That is, any injury for which \$100,000 ceiling would have been paid had settlement been reached in January 1978, such as a quadriplegia will be eligible for \$100,000 increased by the rate of consumer price inflation between January 1978 and the date of payment of the damages for that injury.”⁸

Cost of Future Care

In severe injury cases, a plaintiff may no longer be able to look after himself and require both non-medical assistants and nursing care. For non medical care think of the things we do around the house- vacuuming, dusting, cleaning the washrooms, household repairs and maintenance, lawn mowing,

⁷ Arnold v. Teno, [1978], Andrews v. Grand & Toy Alberta Ltd, [1978] and Thornton v. Board of School Trustee of School District No. 57(Prince George), [1978]

⁸ Bruce, Christopher J. *Assessment of Personal Injury Damages, Fourth Edition*. Markham. LexisNexis, Butterworths, 2004, Page 33

raking the leaves, gardening or snow removal costs. The paraplegic may require 24 hour nursing care.

Quantifying Future Care Costs

Bill 198 changes itemized in appendix A expanded the plaintiff's right to sue in court for excess health care expenses. If the threshold criteria are met, even if the injury is not catastrophic, the plaintiff can recover expenses that are higher than the monetary limits set out in The Statutory Accident Benefit Schedule. For the plaintiff who sustained catastrophic or permanent serious injury a "Future Care Cost Analysis (FCCA)"⁹, also known as a "Life Care Plan"¹⁰ identifies long-term needs. The all-inclusive study outlines the extraordinary services and goods, and the costs, required by the plaintiff who has chronic health needs. This health assessment duplicates as closely as possible the lifestyle including their status and function but for the accident. The objective report details extraordinary expenditures that are reasonable and necessary for medical management, additional rehabilitation and assessment options for long-term support. The recommendations should be reasonable and not a "wish list."¹¹

⁹ Madras, Eva. "Future Care Cost Analysis: Assessing and Quantifying Future Needs." *WP Without Prejudice* February 2005 Vol. 69 No. 6 Page 66

¹⁰ Madras, Eva. Page 66

¹¹ Madras, Eva. Page 67

Any award for future care costs is usually a lump-sum amount, which will accumulate interest or investment income in future years. Since this investment income will be subject to income taxes in the hands of the recipient a gross-up for income taxes may be required to ensure that the lump-sum award provides sufficient future funding of the specific expenses intended.

Loss of Future Earnings

The difference in earnings post incident versus what the earnings would have been but for the accident is the loss of future earnings.

Loss of Opportunity or Loss of Earning Capacity

What do these terms mean? The Courts do not clarify or explain the different concepts on these imprecise heads of damages. In *Colonna v. Mitchell* (1997), Justice Pitt states ¹² “[W]hether these factors are considered under the rubric of competitive advantage, loss of earnings capacity or some other designation, they warrant an additional award of \$40,000.00.”

Loss of Earning Capacity

The case plaintiff has not suffered a loss in income subsequent to the accident however he no longer has the ability to receive promotions in his occupation and is stuck in his present position due to injuries sustained.

¹² *Colonna v. Mitchell* (1997) paragraph 33

Loss of Competitive Advantage

The plaintiff suffered no loss of income but is unable to work as efficiently or attendance is not as reliable as the uninjured person in the same occupation.

The potential for work opportunities and more wages has declined.

A judge in a recent court case involving a long distance truck driver awarded \$20,000 for loss of competitive advantage based on the medical evidence that the injuries made it more difficult to complete the long-distance driving. The evidence did not support a loss of future income claim.

Loss of Future Income

The plaintiff was studying or training to enter a different field of employment.

Loss of Opportunity

These are short-term pecuniary losses where the plaintiff was being considered for a promotion and pay raise or an entrepreneur was about to sign a contract. The opportunities may have been lost due to injuries sustained, which included a lengthy hospital stay. There needs to be a determination as to whether the loss of opportunity was temporary or permanent. Did the wage earner catch up later? Did the contract get awarded to some other entrepreneur?

“The terminology used by the Courts in Canada today to describe damage awards for future pecuniary loss relating to income is confusing at best. Loss

of competitive advantage and loss of future income have been variably referred to as “loss of opportunity/chance,” or “loss of earning capacity.”¹³

Discount Rates for future pecuniary losses.

The Rules of Civil Procedure in Ontario specify the rates.

Gross-Up for Income Taxes

A lump sum will be invested to produce investment income that will fund the future income stream being substituted by the award. The investment income will be taxed upon receipt; therefore a gross-up for income taxes should be added to the award.

Retirement Age

Researchers zero in on two potential determinants of retirement age pension income and health. Christopher Bruce indicates a person will retire early if there is sufficient pension income or other financial resources or health is deteriorating (maybe as a consequence of the personal injury). A person may work longer if there is insufficient pension income to maintain a certain

¹³ Marcovitch, Daniel. “Future Pecuniary Damage Claims: Weapons of Mass Deception?” *Without Prejudice Vol. 69, No. 5, January 2005, Page 22-25*

lifestyle. Research results indicate there is minimal statistical basis to argue that retirement of one spouse will influence the retirement of the other spouse.

Mortality rates

These rates can be obtained from statistics Canada. But we also need to consider the expected life of a plaintiff both before and after the incident.

There has been controversy over the damages to be awarded for the lost years or the shortened life expectancy of the injured party.

Bruce states: "Most experts testifying in Canadian cases have relied on the principle that underlay Mr. Justice Dickson's decision in *Andrews*, that the plaintiff is to be compensated for the pleasure which will be foregone during the lost years."¹⁴

"In particular, at least since *Semenoff v. Kochan* (1991), [59 B.C.L.R. \(2d\) 195](#) (C.A.), there appears to have been agreement that the plaintiff should be compensated for that portion of his or her income which remains after deduction of "personal living expenses" or "necessities."¹⁵

"At the other extreme, Madam Justice Beverley McLachlin, in *Toneguzzo-Norvell v. Burnaby Hospital*, [\[1994\] 1 S.C.R. 114](#), expressed concern that the plaintiff's estate not be unjustly enriched."¹⁶

The mortality rate to be applied is subjective based on the injured party circumstances.

Management fees

In cases where the plaintiff is unable to manage their damage awards a management fee is usually calculated based on the dollar value of monies managed. If the funds are being kept in low risk bonds, GICs or invested

¹⁴ Bruce Text 35

¹⁵ Bruce Text 35

¹⁶ Bruce Text 35

with a reputable broker then there should be no allowance for management fees.

Income Taxes

Revenue Canada's Interpretation Bulletin IT-365 indicates damage awards for injury or fatality is tax-free. Interest and other investment income earned on the awards are subject to normal income tax.

If a lump-sum award is used to purchase an annuity contract, the interest will be taxable.

4.0 Detailed Findings- The Employees

The following questions should be addressed as per Alberta economist

C. Bruce: see questionnaire on Web site www.economica.ca:

“Information required to complete a loss of income (personal injury) assessment

We have outlined below the information which we typically require in order to complete a loss of income assessment.

- *The plaintiff's date of birth.*
- *The scheduled trial date, or the date which we should use as an “assumed settlement date.” A settlement date is necessary to provide a “point of reference” for our calculations.*
- *Any items that will provide us with a brief overview of the details behind the accident, the injuries, and medical treatment. Note that, as economists, we are not qualified to interpret items such as operation reports, MRI reports, and so*

forth. Therefore, it is not necessary to send us all of the technical medical reports which are available.

- *Any available reports from vocational, cost of care, and/or household services experts.*
- *Any psychological or medical assessments that discuss issues relating to the plaintiff's employability.*
- *The plaintiff's income tax returns (or computer printouts provided by Revenue Canada). Ideally, we would like to have tax returns from at least the last four or five years before the accident, as well as the returns since the accident. At a minimum, we need estimates of the plaintiff's employment income at the time of the accident and since the accident.*
- *The plaintiff's educational background.*
- *Information concerning the plaintiff's employment history. Specifically we would like to know what jobs have been held, what the wages were with each employer, whether the plaintiff was part-time or full-time, the amount of overtime worked, and so forth. Also we would like information regarding employer-provided fringe benefits (including pension). Of course, this information is most important for the job(s) held immediately before the time of the accident, and over the time period since the accident.*
- *We would like information regarding what the plaintiff's employment plans had been at the time of the accident. For example, were there plans to change jobs? Would the hours worked have increased or decreased? Were there any likely promotions in the future? Were there any plans for retirement? Any letters received from the plaintiff's employer(s) relating to these issues would be useful.*
- *Similarly, we would like information regarding what the plaintiff's employment plans (if any) are now.*
- *If there is a claim for a loss of household services, then it will be helpful to obtain from the plaintiff a list of the time and activities spent on household activities prior to the accident and since the accident. We have attached a form which can be completed by the plaintiff and returned to our office, if there is such a claim.*
- *If available, please provide portions of Examinations for Discovery transcripts which deal with any of the above topics.*

To summarize, we require any information which relates to what the plaintiff's career path (and income potential) would likely have been if the accident had not occurred; and what it will likely be now, given that the accident has occurred.”¹⁷

¹⁷ Bruce web site economica.ca

To show how the Judge G. I. Thomson approaches the assessment of damages for an employee I have included excerpts from a March 29, 2005 Judgement *Hornick v. Kochinsky* [2005] O.J. No.1629. The judge evaluates the evidence and is the trier of facts in the case. As can be seen the Insurance Act specifies how the loss of income is to be calculated, the judge criticized the accountants for bad assumptions on projected income but for the accident and relies on case precedents for contingencies. The judgement paragraph numbers are indicated for reference.

“JUDGMENT

1 G.I. THOMSON J.:— This action arose as a result of a motor vehicle accident that occurred in the westbound driving lane or shoulder area of the 401 Highway at or near Chatham, Ontario. A fully loaded tractor-trailer traveling westbound at approximately 100 kph in the driving lane or on the shoulder or both crashed into the rear of the stopped or slow moving maintenance dump truck being driven by the plaintiff Whitney Hornick [Hornick] in the driving lane or on the shoulder or both. He was legally working on routine maintenance of the highway and was in the middle of a convoy of maintenance vehicles heading west on the 401.

2 Hornick claimed he suffered physical, psychological or other mental injuries as a result of the accident. The other plaintiffs were family law claimants.”¹⁸

399 S. 267.5(1) of the Insurance Act deals with past-lost income. There is a distinction in the measure of loss of income "before the trial of the action" and "after the trial of the action." It states:

267.5(1) Despite any other Act and subject to subsection (6), the owner of an automobile, the occupants of an automobile and any person present at the incident are not liable in an action in Ontario for the following damages for income loss and loss of earning capacity from bodily injury or death arising directly or indirectly from the use or operation of the automobile

Damages for income loss suffered in the seven days after the incident.

Damages for loss of earning capacity suffered after the incident and before the trial of the action in excess of 80 per cent of the net loss of earning capacity, as determined in accordance with the regulations,

Damages for loss of earning capacity suffered after the incident and before the trial of the action in excess of 80 per cent of the net loss of earning capacity, as determined in accordance with the regulations,

¹⁸ *Hornick v. Kochinsky* [2005] O.J. No.1629

suffered during that period. 1996, c. 21, s. 29. [my emphasis added]

400 "Before the trial of the action," loss of income is determined on the basis of 80% of the net loss calculated after deducting income tax, CPP and UIC. Future loss of earning capacity is assessed on the basis of the gross loss of income without deduction for income tax and other items."¹⁹

“403 Therefore, the court should calculate past loss of income to the date of judgment and loss of future earning capacity thereafter. As such, the provisions of section 267.5(1) should apply until the date of judgment.”²⁰

404 The Rules of Practice state specifically in rule 49.03 that the costs consequences of the rule are triggered by an offer made more than seven days "before the hearing commences."²¹

424 Exhibit 51 was a report from Dilkes, Jeffery and Associates authored by James E. [Jay] Jeffery [Jeffery] and dated February 26, 2003. It was based on a valuation date of February 24, 2003. Exhibit 59 was Mr. Wallack's [Wallack] report.

425 The defence argued that the figures utilized by Jeffery and Wallack were not correct. Jeffery's numbers [\$112,686.00] were different from Mr. Wallack's numbers [\$164,679.00].

426 After considering their calculations I am satisfied there did not appear to be any acceptable way for either Jeffery or Wallack to fix the income of Hornick as they did in exhibit 51 or 59. The Plaintiff did not lead evidence that established by substantial probabilities that the projected income was as set out by these two men.

427 A more reasonably probable way to calculate the income would be to take a historical average for the last 4 years that he worked commencing in 1994 up to 1997 when it appears that he would have earned \$31,333.00 according to the submission of the defence. To that figure should be added the appropriate cost of living increase on a yearly basis to get the past-lost income to February 23, 2003. Counsel will work out this amount in accordance with my final directions at the end of this judgment.”²²

¹⁹ Hornick v. Kochinsky [2005] O.J. No.1629

²⁰ Hornick v. Kochinsky [2005] O.J. No. 1629

²¹ Hornick v. Kochinsky [2005] O.J. No. 1629

²² Hornick v. Kochinsky [2005] O.J. No. 1629

“ 428 The test concerning how to assess future loss of earning capacity [future income loss] was set out in *Schrump v. Koop* [18 O.R. \(2d\) 337](#) The head note summarizes the test easily:

"In the area of the law relating to the assessment of damages for physical injury, though it may be necessary for a plaintiff to prove on the balance of probabilities that the tortious act or omission was the effective cause of the harm suffered, it is not necessary for him to prove that future loss or damage will occur, but only that there is a reasonable chance of such loss or damage occurring. Speculative and fanciful possibilities unsupported by expert or other cogent evidence can be removed from the consideration of the trier of fact and should be ignored, whereas substantial possibilities based on such expert or cogent evidence must be considered. This principle applies regardless of the percentage of possibility, as long as it is a substantial one, and regardless of whether the possibility is favourable or unfavourable. Thus, future contingencies which are less than probable are regarded as factors to be considered, provided they are shown to be substantial and not speculative: they may tend to increase or reduce the award in a proper case. [my emphasis added]"²³

“Contingencies:

433 The court must take into consideration contingencies which may affect future earning capacity. As Dickson J. said in *Andrews v. Grand & Toy Alberta Ltd.*, [\[1978\] 2 S.C.R. 229](#) at pp. 253-254:

"(iii) Contingencies: It is a general practice to take account of contingencies which might have affected future earnings, such as unemployment, illness, accidents and business depression. In the *Bisson* case, [64 W.W.R. 768](#), which also concerned a young quadriplegic, an allowance of 20 per cent was made. There is much support for the view that such a discount for contingencies should be made: see e.g. *Warren v. King*, [1963] 3 All E.R. 521; *McKay v. Board of Govan School Unit No. 29 of Saskatchewan*, [\[1968 S.C.R. 589\]](#). There are, however, a number of qualifications which should be made. First, in many respects, these contingencies implicitly are already contained in an assessment of the projected average level of earnings of the injured person, for one must assume that this figure is a projection with respect to the real world of work, vicissitudes and all. Second, not all contingencies are adverse, as the above list would appear to indicate. As is said in *Bresatz v. Przibilla*, in the Australian High Court, at p. 544: "Why count the possible buffets and ignore the rewards of fortune?" Finally, in modern society there are many public and private schemes which cushion the individual against adverse contingencies. Clearly, the percentage deduction which is proper will depend on the facts of the individual case, particularly the nature of the plaintiff's

²³ *Hornick v. Kochinsky* [2005] O.J. No. 1629

occupation, but generally it will be small: see Stevens, "Actuarial Assessment of Damages: The Thalidomide Case" (1972), 35 M.L.R. 140, at p. 150.

In reducing Andrews' award by 20 per cent Mr. Justice Kirby gives no reasons. The Appellate Division also applied a 20 per cent reduction. It seems to me that actuarial evidence could be of great help here. Contingencies are susceptible to more exact calculation than is usually apparent in the cases; see Traversy: "Actuaries and the Courts", 29 Aust. L.J. 557. In my view, some degree of specificity, supported by evidence, ought to be forthcoming at trial.

The figure used to take account of contingencies is obviously an arbitrary one. The figure of 20 per cent which was used in the lower Courts (and in many other cases) although not entirely satisfactory, should, I think, be accepted."²⁴

"The calculation:

436 Exhibit 51 contained the plaintiff's calculation of future lost earnings. Schedule 1 set out that the age at valuation date was 44.34 as of February 24, 2003. The mortality tables were as set in the Life Tables, Canada, 1995-97. Net discount rates of 2.5% for the first 15 years and 2.5% thereafter were utilized. Hornick had a life expectancy during the period considered [to age 65] of 19.6 years and the present value of \$1000.00 per year was \$15,470.00 which I accept.

437 Schedule 2 was an illustration of factors to determine the present value of future losses. The figure for basic earnings needs to be adjusted in accordance with the instructions in the past lost income section and the multiplication extended."²⁵

" 438 In terms of calculating offsetting annual earnings, I find that the calculation on page 4 of exhibit 51 reflects a substantial possibility of offsetting annual earnings of \$12,467.00 and the lost fringe benefits calculations will be acceptable after the basic earnings are recalculated.

439 Page 3 set out an estimate of projected basis annual earnings, figures that will have to be recalculated at a later time in order to come to an average actual income in the years 2003 and 2004. Page 4 set out the offsetting [mitigating] annual earnings based on Hornick's ability to work that would be

²⁴ Hornick v. Kochinsky [2005] O.J. No. 1629

²⁵ Hornick v. Kochinsky [2005] O.J. No. 1629

restricted to occupations with minimal physical demands with medically identified limitations that would restrict his vocational choices. I am satisfied that the calculation of \$12,467.00 is appropriate as is the calculation of lost fringe benefits of \$1923.00.”²⁶

“What are the credits, if any, to be deducted from Hornick's claims?”

443 Credits are offset before the trial and assignments are assignments of future benefits post judgment. The defence is entitled to credits in accordance with s. 267.8(1) of the Insurance Act. The Plaintiff conceded that the Defendant was entitled to credit for the Statutory Accident Benefits [SABS] as well as Income Replacement Benefits [IRBS], received by Hornick.

444 In schedule 2 of Wallack's report [exhibit 59] he details the collateral benefits received as follows:

IRBS	\$ 62,429.00
Disability Benefits to 2,26,03	\$ 76,357.00
Disability Benefits 2,27,03-4,19,04	\$ 76,357.00
[during the trial proper]	
²⁷ TOTAL	\$ 157,318.00

What happens to Whitney Hornick's long-term disability benefits?

456 Plaintiff's counsel conceded that the defence had the right to request an assignment of future long-term disability payments under s. 267.8(12). It is clear that the section allows conditions to be put in place that are "just". I am satisfied that because the Defendant truck company is resident in the U.S.A. that the L.T.D. benefits will not be assigned to U.S.A. Truck until the judgment is paid to Hornick. I make no finding as to whether Hornick is totally disabled. Defence counsel had no difficulty with this condition concerning long-term disability benefits.”²⁸

Judge G.I. THOMSON J systematically goes through the evidence provided by the plaintiff, the plaintiff's lawyer, various experts and the defence and

²⁶ Hornick v. Kochinsky [2005] O.J. No. 1629

²⁷ Hornick v. Kochinsky [2005] O.J. No. 1629

²⁸ Hornick v. Kochinsky [2005] O.J. No. 1629

agrees it to the loss calculation assumptions. The case damages are awarded based on the facts presented at the trial.

An IFA who prepares an expert report for court utilizes professional judgement by synthesizing accounting, economic theory and law. Training and experience make the IFA the preferable expert to prepare loss of income calculations.

6.0 Detailed Findings- Self-employed Individuals (commissioned sales persons and sole proprietors)

Compensation / remuneration is based on performance. An individual's income-earning capacity, but for the accident where there was no employment contract.

The following questions should be addressed: see questionnaire prepared by an Alberta Economist C. Bruce Web site www.economica.ca:

“Additional information requirements for self-employed individuals (personal injury cases)

We have outlined below the additional information which we typically require when the plaintiff was/is self-employed. This information is required in addition to our usual requirements for a loss of income assessment (outlined [here](#)).

- *Financial statements and balance sheets for the business before and (if applicable) after the accident. (The former are often contained within the tax returns.)*
- *Any descriptions the plaintiff can provide regarding the impact of his or her injury on the operation of the business. Has revenue been affected? Has any replacement labour been hired? Have any other costs increased as a direct result of the accident? What has happened in the industry in general since the accident, and what is now expected?*

- *Information regarding the pre- and post-accident intentions of the plaintiff (i.e., expansions, asset sales, new areas of business etc.).*
- *Descriptions of any actions taken to mitigate the loss — Who helped out? How were operations rearranged? Were family members who helped fully paid?*
- *Has the business been sold? Stopped operating? Have any asset sales occurred?*
- *Was (is) any income paid to family members simply as a tax-avoidance strategy?*
- *Did any part of any business expenses actually go towards personal consumption? (Examples include fuel, telephone calls, office supplies, vehicle capital costs...)*
- *If the plaintiff now intends to go into an alternate field, perhaps one in which they formerly worked, we would require information regarding their experience and qualifications in that field.*

More details may be required depending on the level of complexity of the case and the amount of support one wishes to establish for the assumptions used. These cases generally require 1.5 to 2.5 times as much work as ordinary injury and fatal cases, if the full methodology is required, but can be done much more quickly if some approximations are used and/or if assumptions are taken as provided by the plaintiff.”²⁹

I will now address a specific occupation farming as an example of the self employed based on Bruce, Christopher J. & Kerr, William A’s article “Estimating Farm Income to Determine Compensation in Death or Disability Cases.” *The Journal of Agricultural Taxation and Law, Vol. 9, No. 3, Fall 1987 (Reprinted Spring 2004 www.economica.ca), 254-263. Retrieved July 17, 2005, from www.economica.ca.*

When we usually think about what farmers do we think about raising livestock cows and horses, and growing food crops. In South Western Ontario

²⁹ Bruce website [economica.ca](http://www.economica.ca)

the agricultural growth businesses are in greenhouses, nursery products and vineyards.

Farmers often have no idea what their past income was. The IFA should obtain a thorough understanding of the farming business and the industry before delving into the loss of income calculations. IFA assistance provided to lawyers in development of questions for the examination of discovery and requests for gathering documents for production by the other side ensures the appropriate evidence is obtained for IFA's calculations.

An IFA has the skills to investigate and interpret the true financial position of these self-employed individuals. I will outline the issues that should be considered when calculating the loss of income of this self-employed plaintiff. The loss calculations are difficult to complete and farmers' accountants utilize complex financial treatment for income tax purposes. An income tax person with experience in farm operations may need to be consulted. Farmers receive various subsidies specific to a province and the particular farming operation and may participate in the Canadian Agricultural Income Stabilization Program (CAIS program), which provides some income protection during low-income years. The IFA must realize these programs may have existed in past years but there is no guarantee that they will exist into the future.

There are two types of income personal income and investment income. We need to determine what contribution the farmer made to the farm business and how is his compensation calculated? An acceptable template needs to be

formulated that is easy to understand by all parties in the handling of the lost income claim. Future loss of income calculations must consider the agriculture marketing boards control on pricing and the long term prospects of farming income given the often reliance on weather conditions for crop production or feed for livestock.

We separate the farmer's compensation for physical labour and management efforts versus return on investment on the farm buildings, equipment and land. Pre accident income can not be the drawings from the farm operation since that may represent the cash flow required to cover living expenses.

There can be substantial changes in income from year to year. Cyclical and unpredictable long-term market forces need to be taken into account. The tax returns provide little guidance since farmers are allowed to expense their purchases on a cash basis. The self-employed farmer may also be expensing to the business his personal auto expenses, travel and entertainment expenses, those for himself, spouse and children. Family members may receive salaries that do not represent the appropriate market value compensation given their actual contributions. Maybe the farmer was drawing less and less each year because cash had to be left in the business due to bank covenants or he did not need funds because he received an inheritance. On the other hand drawings may have been increasing annually (spend it or loose it) due to inevitable bankruptcy, a child needed funds to attend university, aged parents required nursing home care etc. Minimize reliance on prior year drawings or earnings and recalculate the past income.

The first source of income is from the return on the investment. The farm value at a point in time could be sold and the proceeds invested in interest bearing bonds that would generate interest income. Presumably the farmer would at least need to earn this level of income or he would stop farming. That is the opportunity cost of alternate investments must be considered. If the earnings are less than the opportunity cost of alternate investments the shortfall is what Christopher Bruce calls the psychic income. The farmer will stay on the farm even when it is obvious he would be better off to sell the investment. If the farmer is disabled or killed in an accident the assets are still available to be sold by the farmer or his heirs. The proceeds would generate investment income into the future and there is no investment loss to calculate.

The farmer's claim for damages is based on his inability to do the physical labour or manage the farm operation. The loss of these services needs to be segregated from the farm investment income. Christopher Bruce in his article suggests a four-step process.

First a farm appraiser should be retained to determine the net market value of the entire farm operation on the date of the accident. We need to establish a starting point fair market value such as the purchase price of the farm when acquired. If the farm was transferred from one generation to another since the transfer price may have been substantially less than the true fair market value at the time. Due to the capital gains exemption on family farms the

value may even have been overstated to utilize the exemption before it disappears.

Step two calculate the after tax profits of the farm, add back the payments made to the farmer and remove earnings reinvested into the farm operation.

Disregard the income tax returns. Include in net profit calculations any reinvestments such as purchases of seed, breeding livestock, and retention of breeding animals born on the farm.

We must deduct goods consumed or used valued at the retail value since it is the true opportunity cost for the farmer's family. Discussions with the farm family would indicate personal consumption of items such as milk, beef cattle, hogs, chickens, vegetables etc.

Step four is to identify sources of net market value changes during the farmer's period of ownership. We must identify inflation / deflation, on the specific assets. Itemize the purchased additions or improvements to land buildings, equipment, livestock and quotas, and determine changes in the farm operation goodwill. The actual cost of machinery and buildings is the reinvestment cost. Disregard tax depreciation and calculate real depreciation. Assets that are financed over a period of years should be expensed based on the annual cost.

The rate of change in prices of the farm components over the period of ownership versus the change in fair market value of the entire farm represents the improvement / decrease attributed to the farmer. A good example would be where the astute farmer through crop rotation and addition of

environmentally suitable chemicals upgrades the quality of the soil for future crops and therefore increases the land value per acre. The farmer who constructs his own good quality farm buildings is another good example. The market swings need to be compared to the specific farm to show how the farmer managed to do better than would be expected by the market conditions.

Moving from internal considerations to external, if our farmer worked for another farm operation what would he be paid? Wage statistics are available from Human Resource Development Canada, farming associations and Statistics Canada.

Farms may have more than one enterprise such as dairy cattle and beef cattle. Each of these enterprises should be examined separately. The Milk Marketing Board is under different price pressures than the Beef Marketing Board. The farmer may be more successful at managing one enterprise than the other.

Step three the imputed investment earnings should be calculated annually based on the annual fair market value of the farm operation and the appropriate interest rate.

Step four the revenue net of expenses plus the appreciation of the farm assets are calculated for each year. To calculate the loss of income but for the accident we deduct the imputed investment income and increase in asset values due to inflation. The difference is what the farmer generated by his physical labour and management skills and therefore the loss suffered due to

disability or death. We do these calculations for each year to eliminate the effects of commodity price fluctuations.

As can be seen the market value of the farm does have a direct effect on the estimation of the damages if the removal of the specific farmer changes the market value. Consideration must also be given to the timing of the incapacitation. If it occurs at the bottom of a commodity price cycle then a claim for reduction in market value may be valid.

Except for the circumstances previously noted the market value of the farm should not be taken into consideration in the loss calculation. Timing of the farmer's incapacitation and the family's subsequent sale of the farm probably occurs either prior or later than originally planned. Any interest gains from an early sale is not an unjust gain since it would have been part of the normal profit of the farm operations and is removed from the net profit in the calculation of damages. No double counting of interest occurs.

After that part of farm income isolated to the farmer's efforts we can project the loss of future income. With a minimum of twenty years of annual data or five years of quarterly data an agricultural economist or a statistician can use the statistical technique, multiple regression. The cautions in using this technique are case specific. Straight-line multiple regression may not be sophisticated enough. For example the cattle cycle can vary from eight to eleven years so twenty years of data would be insufficient data and would not provide an appropriate statistical basis for forecasting future income. On the

other hand the chicken and hog cycle are substantially shorter. The untrained individual who has not educated themselves in the industry cycles using regression analysis can produce inferior correlation between variables and subsequently result in skewed and erroneous projections of future earnings. An IFA would not have the training to properly apply these statistical techniques. The appropriate expert with industry specific experience should be retained. A university professor at the University of Guelph who has completed statistical research in agriculture may be a suitable expert in these matters. He may also provide insight into technological advances in the farming industry. As can be expected the longer the forecast period, to retirement, the statistical forecast reliability will decrease.

Case specific data may not be reliable enough to apply multiple regression analysis. In those instances industry data such as case studies projecting average growth rates of farm income may be the next best alternative. The complications are in farms that produce multiple products such as dairy cows, beef cattle and hogs. The proportions of revenue would be available from the accounting records from the prior five years. Research studies would be assessed for dairy cows, beef cattle and hogs. Another alternative is to locate industry rate of growth of sales specific to our case commodities. We would apply this to our accounting numbers.

Lastly or in conjunction with a previous method, we could look at growth rates of wage earners with the equivalent level of education and or experience. The theory is based in economics that if the disparity of growth

rates of income vary too much then farmers will move to another vocation over time because they are better off.

Calculating farmer's losses but for the accident is difficult due to the coexistence of business and personal expenses on family farms, the cyclical instability of most agricultural markets and the complex income tax regulations. Stick to a method as outlined previously. There is no mathematically right number but there are proven scientific approaches and reasonable assumptions when examining the market forces in a specific commodity. The IFA should consider a range of calculations based on this approach that the court can consider. Our projections are only as good as the data we are relying on, as they old saying goes you cannot make a silk purse out of a sow's ear. The approach suggested started from the subjective, what actual case specific data can we work with and continued to the industry data and then to the statistics on similarly educated individuals. This is only the framework but the case often turns on the best assumptions which the judge or jury uses to award the damages.

As can be seen, calculating a farmer's loss of income due to personal injury is a complicated matter that cannot be reduced to numbers input into an Internet template.

Detailed Findings Non –Salaried Individual

The following questions should be addressed when the plaintiff is a child or young adult. (I note that the current jurisprudence does not consider a fetus a child until born alive.):

The following questionnaire was prepared by C Bruce on the Web site

www.economica.ca:

“Information required to complete a loss of income (personal injury) assessment when the plaintiff is a minor or young adult

We have outlined below the information which we typically require in order to complete a loss of income assessment when the injured person is a minor or young adult (i.e., the person does not have an established career path).

- *The plaintiff's date of birth.*
- *The scheduled trial date, or the date which we should use as an “assumed settlement date.” A settlement date is necessary to provide a “point of reference” for our calculations.*
- *Any items that will provide us with a brief overview of the details behind the accident, the injuries, and medical treatment. Note that, as economists, we are not qualified to interpret items such as operation reports, MRI reports, and so forth. Therefore, it is not necessary to send us all of the technical medical reports which are available.*
- *Any available reports from vocational, cost of care, and/or household services experts.*
- *Any psychological or medical assessments that discuss issues relating to the plaintiff's employability.*
- *What level of education does the plaintiff presently have? How successful has he or she been in school? Is there any information which indicates how this would be different if the accident had not occurred?*
- *We would like information regarding what the plaintiff's academic and/or employment plans and potential had been (or might have been), but for the accident. In addition, we would like any available reports that discuss the plaintiff's present academic and/or employment potential, now that the accident has occurred.*
- *Since the plaintiff is a minor/young adult, our loss of income assessment may rely partially on the education and career*

paths of the immediate family. Therefore, we would like information regarding the education levels, occupations, and earnings of the immediate family, particularly the plaintiff's parents and siblings.

- *If available, please provide portions of Examinations for Discovery transcripts which deal with any of the above topics.*

To summarize, we require any information which relates to what the plaintiff's career path (and income potential) would likely have been if the accident had not occurred; and what it will likely be now, given that the accident has occurred.

In addition to the usual detailed summaries of our economic approach, assumptions, and results, our loss of income reports include an inflation-adjustment graph which can be of assistance in determining an appropriate award for non-pecuniary damages. Also, we provide a table of judgment interest rates which can be applied to "special damages" costs which have been incurred over the pre-trial period."³⁰

The following recent case and the appeal outlines the personal injury damage award for a student.

Walker v. Ritchie [\[2003\] O.J. No. 18](#) Original judgement

Walker v. Ritchie [\[2005\] O.J. No. 1600](#) April 20, 2005 Appeal

The analysis provides a learning tool to assess the reasonableness of the assumptions based on case specific facts.

"The judgment of the Court was delivered by

E.E. GILLESE and S.E. LANG J.J.A:—

A. Introduction

¶ 1 On a dark April night in 1997, 17 year-old Stephanie Walker ("Stephanie") was driving a friend home along a country road. Further along the same road, Donald Ritchie was having trouble reversing his tractor-trailer into his driveway. When Stephanie came over the top of a hill, she could not see that the rear of Mr. Ritchie's tractor-trailer was blocking her side of the road. Stephanie's van struck the rear of the tractor-trailer. Stephanie suffered catastrophic injuries. With a great deal of support, Stephanie is able to live

³⁰ Bruce website www.economica.ca

independently, but she will never be able to resume the life that she would have led but for the accident.

¶ 2 Stephanie and her family sued Mr. Ritchie, who owned the tractor. As well, they sued Harold Marcus Limited ("Marcus"), the owner of the trailer. Marcus was also Mr. Ritchie's employer. After a sixteen-day trial, Brockenshire J. found both defendants liable. He awarded Stephanie damages of \$4,959,901.00 plus interest and awarded her family members damages under the Family Law Act, R.S.O. 1990, c. F.3. In addition, the trial judge awarded costs of \$440,167.90 for legal fees plus a premium of \$192,600.00.”³¹

These premium awards are given in cases where the plaintiff has no financial resources and the lawyer financed the costs and the fees until the settlement is reached.

¶ “12 At the time of the accident, Stephanie lived with her parents. Although she was in her last semester of a general program at high school, Stephanie had not made any post-graduation plans. She was a very talented soccer player who, by all accounts, might have pursued a soccer scholarship to universities in the United States. For many years, Stephanie had focused her attention on soccer and athletics, but at the time of the accident she was showing increasing focus on academics. Her marks, which were already "above average," were improving. The evidence established that both before and after the accident, Stephanie showed strong motivation to succeed at her chosen endeavours.

¶ 13 While no decisions had been made about her future, Stephanie's father, a retired high school teacher, had spoken with Stephanie about returning to school to complete sufficient Ontario Academic Credits ("OACs") so that she would be eligible to attend university. Stephanie's mother was a professional nurse. Both parents expected that all their daughters would attend post-secondary education. Both Stephanie's older sisters attended university and both obtained degrees in education. Her younger sister attended community college.

¶ 14 Different avenues were available to Stephanie to pursue a university education. Although she could not have entered university from a general program, she could have remained in high school for a further year to accumulate sufficient OACs, or she could have attended community college and then transferred to, or subsequently attended, university. The head of Stephanie's guidance department testified that, increasingly, students attend

³¹Walker v. Ritchie [2005] O.J. No. 1600

community college followed by university. In 1997, a transfer from community college to university could be accomplished without OAC courses. Alternatively, Stephanie could have attended university as a mature student, had she waited to apply until she attained the age of twenty-one. It was possible also that Stephanie would have simply pursued a community college education, or would have stopped her education altogether. The accident, however, precluded Stephanie from following any of these options.”³²

“ 17 As a result of her constellation of deficits, Stephanie is not competitively employable. If she is to maintain a job, it will be only with a benevolent employer. Even with such an employer, after a few months, brain-injured employees tend to lose their jobs. Even so, Stephanie very much wants to work and to contribute to society.”³³

“ 22 Given Stephanie's injuries, the trial judge awarded her non-pecuniary damages of \$250,000.00. With respect to her employability, the trial judge concluded - a conclusion that is not challenged - that Stephanie will be unable to maintain competitive employment, but she will likely earn some money during her lifetime earning the minimum wage.”³⁴

“FUTURE LOST INCOME

¶ 124 In this area, there was agreement that the grievous injuries Stephanie suffered would not affect her life expectancy. There was therefore no problem with "lost years". Mr. Fleck retained Mr. Ian Wollach of Rich Rotstein, Chartered Accountants, in Toronto to prepare a report of the present value of future lost earnings. Mr. Woodward retained Peter Ross of Forecs Ltd. to critique the Rich Rotstein report and then to do an independent report. There was no question raised as to the qualifications of these two experts to prepare this type of report, or the accuracy of the arithmetical calculations carried out to produce the results presented. The difficulties relate primarily to the presumptions and assumptions upon which the reports are based.”³⁵

“ 131 Mr. Wollach and Mr. Ross both presented calculations of the present value of projected income losses for Stephanie, presuming a university education, forward to age 65. Mr. Wollach's number is \$1,690,250. The comparable figure for Mr. Ross is \$1,070,694. One of the principal reasons for the difference is that Mr. Wollach uses as his base, the average income of all university graduates which he notes at \$65,769. Mr. Ross did his calculations on five-year age groupings, with different average earnings in

³² Walker v. Ritchie [2005] O.J. No. 1600

³³ Walker v. Ritchie [2005] O.J. No. 1600

³⁴ Walker v. Ritchie [2005] O.J. No. 1600

³⁵ Walker v. Ritchie [2003] O.J. No. 18

each grouping, but notes that the average to age 65 of the groups he used is \$48,346. The difference is due to the fact that Mr. Ross chose to use the figures for female university graduates, rather than all university graduates.”³⁶

¶ 136 I find that the Rich Rotstein approach to future wage loss is the most reasonable one to use in the circumstances of this case.

¶ 137 Mr. Ross, in his calculations, made allowances for labour market contingencies for part-time and full-time unemployment which, on the figures he was using worked out to 20.5%, and added to the figure thus reduced, 12.1% for employee benefits. Mr. Wollach, in his report, considered the negative contingencies for lay-off, unemployment, forced early retirement and disability, but noted that these are mitigated by statutory employee benefits and non-statutory benefits including disability and pension plans. He considered positive contingencies such as promotion, salary increases beyond contemplated levels, and the possibility of earned income beyond age 65. Further, he considered productivity improvements, noting a real wage growth in Canada since 1920 of over 1% per annum, and future forecasts of wage growth at 0.88% per annum for the years 2005-2014. He noted that a study had shown the statutory employee benefits on average amount to 9.3%, and non-statutory employee benefits, other than vacation and holiday pay, average 11.5% of payroll costs. Those two numbers add to 20.8%, much different from the 12.1% used by Mr. Ross. The approach taken by Rich Rotstein was simply to assume that the positive contingencies plus the value of employee benefits were equal to the negative contingency risks. In Mr. Wollach's evidence before the court, he specifically adopted this approach as what he in his considered opinion felt was the most reasonable approach to use in this case.

¶ 138 I accept the evidence of Mr. Wollach and his suggested approach. In my view it accepts the obvious fact that there are a number of variables, among various occupations, employers etc, in addition to the variables personal to each employee. It is obvious that the annual figure, as well as the forecast figure for lifetime earnings, has to be, despite the mathematical calculations used, still only an estimate put forth for assistance in assessing a future loss.

¶ 139 I therefore accept, as the most reasonable in the circumstances, the Rich Rotstein calculation of present value of future lost income of \$1,690,250 as the best available professional estimate of future loss, based on the parameters suggested.

³⁶ Walker v. Ritchie [2003] O.J.No. 18

¶ 140 I have already indicated that in my view, that figure needs to be adjusted to show graduation from university as occurring a year later than was used in the assumptions.

¶ 141 I must deduct a negative contingency factor on account of the other possibility which I found to be reasonable - that Stephanie would have gone to community college and then not, either immediately or sometime thereafter, gone to university. Mr. Ross had done calculations, based upon average lifetime earnings of Ontario female community college graduates. Although he provided details by age group leading to a lifetime average of \$33,858, that apparently is for college students who have taken a one-year course, because he indicates that the earnings for two-year graduates are 4.4% higher or \$35,360 and for three-year graduates they are 14.5% higher or \$38,789. Using the figure he developed for lifetime earnings, with adjustments only for mortality, and therefore comparable to Mr. Wollach's calculations, he arrived at \$875,629. If that was increased by 4.4% to represent a two-year course (which I would think most likely for Stephanie) I arrive at \$914,157. After due consideration, I have concluded that the fairest and most appropriate contingency deduction to make from the lifetime earnings for a university graduate figure, which I concluded was the most likely of the reasonable possibilities, to account for this other reasonable possibility, is 10%.”³⁷

“PAST WAGE LOSS

¶ 144 Mr. Ross did no calculation of past wage loss, based on Stephanie going to university. He did a calculation resulting in a figure of \$67,243, on the basis of her going to a community college for a year and then joining the work force. Mr. Wollach arrived at a figure for past loss of income to September 9, 2002 of \$26,457, basing the calculations on assumptions that she would have worked an average of 10 hours per week during the school year and 12 weeks full-time in the summer, all hours paid at minimum wage of \$6.85 per hour. I find those assumptions to be fair and reasonable based on Stephanie's past history. Due to my above finding, that calculation will now have to be extended to encompass a further year. Also, in fairness, to give equal recognition to the secondary reasonable assumption that Stephanie would have not gone to university, a positive contingency of 10% should be applied to the new figure for past wage loss.”³⁸

The following paragraphs were taken from the appeal Walker v. Ritchie [2005] O.J. No. 1600 of the original judgement Walker v. Ritchie [2003] O.J. No. 18

³⁷ Walker v. Ritchie [2003] O.J.No. 18

³⁸ Walker v. Ritchie [2003] O.J.No. 18

“36 Had Stephanie pursued a university education, as an average university graduate she would have expected, as a starting point, a salary of \$57,190.00 annually, with an average annual salary over her lifetime of \$65,769.00.

¶ 37 After setting a base annual earnings loss, a trial judge must refine the award by properly considering the potential negative and positive contingencies. Examples of negative contingencies that impede the production of income are job loss, forced retirement, disability prior to normal retirement age, and the possibility that a plaintiff may, after all, have pursued a different path. At least to some extent, however, these negative contingencies are offset by employer- or government-provided benefits programs. Factors that might improve the plaintiff's potential income (i.e. positive contingencies), include promotion, labour productivity increases, and continuing employment after normal retirement age. To some greater or lesser extent, negative contingencies and positive contingencies may be found to offset each other.

¶ 38 The trial judge recognized the need to adjust for both positive and negative contingencies. He cited *Andrews v. Grand & Toy Alberta Ltd.*, [\[1978\] 2 S.C.R. 229](#), for the principle that such deductions depend upon the circumstances of the particular plaintiff but, generally, will be small.

¶ 39 Looking at those contingencies, the trial judge recognized that Stephanie might not have gone to university, but instead pursued a community college education, an education that statistically would have resulted in lower average earnings. To reflect that contingency, he deducted 10% from Stephanie's award for loss of future income. As well, the trial judge made a further deduction from the award to reflect that, with her post-accident limitations, Stephanie might earn income in the future. He found such employment would likely be part-time clerical work in a supportive environment at or near the minimum wage. He quantified the appropriate deduction at \$100,000 on evidence that Stephanie's future employment would be limited to about one-third of normal working hours and would not likely extend beyond age 60.”³⁹

“Nevertheless, we also found that the education levels of the child's parents were only indicative of a child's educational attainment. The only situation in which 50 percent of the children of a set of parents had the same educational level as their parents (when both parents had the same education) was that in which both parents had university degrees. In every other case, it was rare for the probability that children would share their parents' educational attainment to exceed 33 percent. This strongly suggests that, in the prediction of a child's

³⁹ *Walker v. Ritchie* [2005] O.J. No. 1600

educational success, experts should generally present at least two (and, more often, three) alternative scenarios.”⁴⁰

“45 As in the other authorities that have considered this issue, the trial judge decided damages on the evidence before him. On the first objection, while damages awards are compensatory in nature and cannot be calculated in a manner that overcompensates a particular individual, a court must be equally cognizant of the fact that gender-based earnings statistics are grounded in retrospective historical data that may no longer accurately project the income a person would achieve in the future.

¶ 46 In this case, the trial judge cannot be said to have erred in applying gender-neutral earnings tables to Stephanie's income loss. He did so on the basis of the evidence before him, which he accepted. In doing so, he noted that at least two of Stephanie's potential options - teaching and kinetics - were areas where pay equity had been achieved. Further, he noted at para. 135 that female earnings tables were based on historical data and might be inappropriate "where the court is attempting to make a forecast stretching many years into the future".⁴¹

“ 47 Further, the loss of income figure which the trial judge accepted included consideration of negative contingencies for layoff, unemployment, forced early retirement, and disability. These contingencies, according to the evidence, were offset by employee benefits as well as by positive contingencies such as promotion, productivity increases, and the possibility of post-age-65 income. The trial judge's decision not to deduct a global amount for negative contingencies was firmly grounded in the evidence he accepted. It is worth noting that, in any event, the gender-neutral statistics, which are a composite of male and female statistics, inherently include absenteeism from the workforce, whether caused by reason of illness, childcare or other circumstance.

¶ 48 In this case, as in most, an individual approach is required to the assessment of future loss of income. The trial judge applied an individual approach to his assessment of Stephanie's loss of income. He chose to apply

⁴⁰ Bruce, C Forecasting the Rate of Growth of Real Wages (Productivity The Expert Witness Newsletter Spring 2004 Vol. 9, No. 1

⁴¹ Walker v. Ritchie [2005] O.J. No. 1600

gender-neutral statistics. We see no error in his decision to do so or in his application of those statistics.”⁴²

“49 On the second ground, the appellants challenged the trial judge's application of earnings statistics for all university graduates, as opposed to those for teaching and kinetics, the most likely of Stephanie's options as determined by the trial judge.

¶ 50 There was, however, a paucity of evidence on teachers' salaries. The guidance counsellor was asked about ranges of teachers' salaries, but she did not have information with her. She thought that for the local school board, they started at \$30,000 or \$35,000 a year. She also thought they reached a maximum of \$70,000 a year but that a teacher who took on additional responsibilities would earn more. That was the extent of the evidence led on teachers' salaries. No evidence was led at trial on the potential earnings of a kinesiologist. Indeed, neither expert on future loss was asked to give evidence about the specific earnings of either of these two particular career paths.

¶ 51 Further, the trial judge did not confine Stephanie's potential career to those two options. Rather he referred to them simply as "a couple of the suggested future professions" for Stephanie. Clearly, the trial judge recognized the speculative nature of determining a career path for this young woman, particularly when she was not precluded from any potential career. This challenge to the trial judge's factual findings cannot succeed.”⁴³

“Most Canadian economists appear to believe that, over the long run, output per worker will increase at between 1.5 and 2.0 percent per year. The 2.0 percent forecast is the consensus prediction of a group of Canada’s leading academic and government economists.⁵ The lower predictions have been made by forecasting agencies: Global Insight has forecast 1.9 percent per year over 2002-26; Informetrica has forecast 1.6 percent over the same period; and the Conference Board of Canada has forecast 1.46 percent over 2002-15.⁶ Thus, as the model described above suggests that real wages will increase more rapidly than productivity, as the baby boomers age, a conservative estimate would be that real wages will increase by 2 percent per year over the next two decades.

Conclusion

It is important to note that this means that all workers’ real wages will increase by 2 percent per year. Economy-wide productivity gains are like a rising tide, they carry all workers with them equally. Even the individual who remains in the same job, with no personal benefit increase in productivity and no promotions, can expect, on average, to from real wage increases of 2 percent per year. With inflation predicted also to be 2 percent per year, he or

⁴² Walker v. Ritchie [2005] O.J. No. 1600

⁴³ Walker v. Ritchie [2005] O.J. No. 1600

she is predicted to benefit from nominal wage increases of approximately 4 percent per year – a 2 percent inflationary increase plus a 2 percent real increase.”⁴⁴

“ 3) Loss of Interdependent Relationship

¶ 52 The trial judge explained this award succinctly at para. 188 of his reasons:

This is a heading of future pecuniary loss, based on the proven and well known fact that two people can live together less expensively than they can live apart. This is a relatively new head of damages, but at the same time has been discussed frequently enough to acquire the acronym L.O.I.R. I was given the case of Reekie v. Messervey, [\[1989\] B.C.J. No. 797](#) and the case of Osborne (Litigation Guardian of) v. Bruce (County), [\[1999\] O.J. No. 50](#) by Mr. Fleck, and the case of Bartosek (Litigation Guardian of) v. Turret Realities Inc., [\[2001\] O.J. No. 4735](#), by Mr. Woodward for the defence.

¶ 53 Over time, the authorities cited by the trial judge, and other authorities, have come to accept loss of interdependent relationship as one component of a compensatory damages award. Such an award compensates a plaintiff for a future financial loss. Before the accident, the sociable and socially-active Stephanie would very likely have formed an interdependent relationship with another person. After the accident, it became highly unlikely that Stephanie would form or could sustain such a relationship.”⁴⁵

¶ 58 Further, in answer to the defence concern about double accounting for childcare costs, the trial judge deducted a further contingency from the expert's estimate of \$150,384.00. In the result, based on the unchallenged expert evidence, the trial judge awarded \$125,000.00 for Stephanie's future loss of interdependent relationship. We see no error in the trial judge's determination under this head of damage, which is firmly grounded in the evidence.”⁴⁶

“F. Non-Earner Benefits

¶ 77 The trial judge held that Ms. Walker was entitled to receive "non-earner" benefits (NEBs) from the no-fault insurer, Wawanesa, in the amount of \$101,553.16, including interest calculated from September 7, 1999, when

⁴⁴ Bruce Forecasting the Rate of Growth of Real Wages (Productivity)¹

⁴⁵ Walker v. Ritchie [\[2005\] O.J. No. 1600](#)

⁴⁶ Walker v. Ritchie [\[2005\] O.J. No. 1600](#)

they were terminated, to the date of trial. He also held that NEBs are not deductible from tort damages.

¶ 78 The appellants challenge only the holding of non-deductibility. They argue that NEBs are pecuniary in nature and properly deductible from damage awards for income loss or loss of earning capacity pursuant to s. 267.8(1) of the Insurance Act. They say that the pecuniary nature of NEBs is evident from s. 12(4) of the Statutory Accident Benefits Schedule - Accidents on or after November 1, 1996, O. Reg. 403/96 (the "Regulation"), that provides that no-fault insurers required to pay NEBs are entitled to deduct from the NEBs any net weekly payments for loss of income that the insured receives as a result of the accident. Further, they point out, the amount of the NEB is reduced when the insured attains the retirement age of 65, just as statutory income replacements are reduced. Thus, they say, the rationale for awarding NEBs is to compensate those not yet in the workforce for their loss of earning capacity and it was an error for the trial judge to fail to deduct them from the damages awarded for income loss.

¶ 79 In holding that NEBs are non-deductible, the trial judge reasoned as follows. The reduction of damage awards on account of collateral benefits is covered by s. 267.8 of the Insurance Act. Section 267.8(7) specifically provides that damages in respect of non-pecuniary loss "shall not be reduced because of any payments or benefits" received. While NEBs are payments or benefits, the trial judge did not accept that they were payments for income loss or loss of earning capacity and therefore deductible in accordance with s. 267.8(1). In paras. 41 and 42 of the supplementary decision, he explains why.

The non-earner benefit is clearly not an income replacement benefit. That is handled by an entirely separate provision in the regulations calling for proof of loss of employment or at least proof of previous employment. The only qualifications required by Stephanie were that she was enrolled on a full-time basis in secondary education at the time of her accident and suffered a complete inability to carry on a normal life. As I indicated in my reasons as quoted above, the criteria I referred to dealt with her involvements in sports, in social activities, and in schooling. They had nothing to do with earning income. Neither did they have anything to do with loss of earning capacity. Further, they had nothing to do with her health care, or the expenses of it. The amount paid under this benefit is a flat rate, which has no relation to past or future income loss, past or future earning capacity, past or future health care expenses, or for that matter any type of pecuniary loss. The rationale for the non-earner benefit is not spelled out in the legislation but I assume it is in part to relieve the perceived injustice of someone who would not qualify for an income replacement benefit receiving nothing, and an attempt to provide what Dickson J. in *Andrews v. Grand & Toy*, [1978] 2 S.C.R. 229 at 261 referred to as, "reasonable solace for his misfortune". As such, this would be

akin to general damages, but as above noted, non-pecuniary losses are not to be reduced because of payments of benefits, the plaintiff has received or is entitled to receive.

The law on deductibility of benefits under s. 267(1), the predecessor section to s. 267.8 of the Insurance Act, was laid down in *Bannon v. McNeeley*, (1998) [38 O.R. \(3d\) 659](#) (C.A.) by Finlayson J.A. He said at pg. 679:

I believe that, where possible, any no fault benefit deducted from a tort award under s. 267(1)(a) must be deducted from the head of damage or type of loss akin to that for which the no fault benefits were intended to compensate ... if at all possible, apples should be deducted from apples, and oranges from oranges ... if the no fault deduction exceeds the amount awarded under the specific heads of damages to which the no-fault benefits can be attributed, then there cannot be resort to another portion of the tort judgment for the balance.

It appears to me that the new s. 267.8 simply adopts that principal [sic]. As I indicated above, the non-earner benefit, if it is akin to any head of damages in a court action, is akin to non-pecuniary or general damages, and the new statutory provisions specifically prohibit a deduction of statutory benefits amounts from non-pecuniary damages.”⁴⁷

“ 84 On a plain reading of these provisions, it appears that NEBs are awarded to compensate for loss of daily life functions and therefore are more akin to general non-pecuniary damages. While s. 12(4) entitles an insurer to deduct payments for loss of income from NEBs, there is nothing in s. 12 to suggest that benefits are in any way related to loss of income. Section 12 provides a flat rate of benefits that is not tied in any way to past or future income loss or earning capacity. Rather than serving as a proxy for income replacement, NEBs provide a benefit for those persons unable to engage in the activities in which they would ordinarily have engaged but for the accident. That is, NEBs are designed to compensate for loss of enjoyment of life. In the case at bar, the activities that Stephanie was prevented from engaging in were competitive athletics, her social life and her activities as a student. None of these activities involved earning an income.”⁴⁸

“89 In their objection, the appellants concede that in *Ligate v. Abick* (1996), [28 O.R. \(3d\) 1](#) (C.A.), the Court of Appeal held that the 2.5% rule 53.09(1) discount rate would only be varied in the face of evidence that factors other than future investment and price inflation, such as wage inflation, supported a different discount rate. However, subsequent to that

⁴⁷ *Walker v. Ritchie* [2005] O.J. No. 1600

⁴⁸ *Walker v. Ritchie* [2005] O.J. No. 1600

decision, rule 53.09(1) was replaced with a new rule that, while structured to provide flexibility in the discount rate for the first fifteen years, continued to use a 2.5% discount rate for the period beyond fifteen years.

¶ 90 In *Martin v. Listowell Memorial Hospital* (2000), [51 O.R. \(3d\) 384](#) (C.A.), a case decided by this court after the amendment, the court contemplated the introduction of evidence regarding wage increases as evidence that might affect the appropriate discount rate.

¶ 91 In this case, evidence called before the trial judge established that the costs of professional services are increasing faster than the rate of inflation, thus justifying the variation to a 1.5% discount rate. Accordingly, the trial judge did not err in accepting evidence supportive of an adjusted discount rate for professional fees.”⁴⁹

¶ 103 Thus, the trial judge erred in principle in awarding counsel fees in excess of the maximum provided for in the grid and that part of the award that reflects counsel fees in excess of the maximum is set aside.”⁵⁰

“ 106 The jurisprudence of this court makes it clear that a premium is available in the first situation. See, for example, *Roberts v. Morana* (1997), [37 O.R. \(3d\) 342](#) (Gen. Div.), *aff'd* (2000), [49 O.R. \(3d\) 157](#) (C.A.). However, until recently, it was unclear whether a premium could be awarded in the second situation. In *Lurtz v. Duchesne*, [\[2005\] O.J. No. 354](#) (released after the hearing of this appeal), Rosenberg J.A., writing for the court, held that a premium can be awarded in addition to substantial indemnity costs where the basis of the costs award is the operation of rule 49.10. He explains the availability of a premium in such circumstances on the basis that premiums are awarded not to punish a losing party but to recognise the result achieved and the financial risk undertaken by counsel for litigants of limited financial means. At paras. 33-35, Rosenberg J.A. writes:

As indicated, the appellants make the broad submission that no premium should be awarded where, as here, solicitor and client costs have been awarded because the judgment exceeds an offer to settle. They rely upon this court's decision in *Finlayson v. Roberts* (2000), [136 O.A.C. 271](#) (C.A.).

⁴⁹ *Walker v. Ritchie* [\[2005\] O.J. No. 1600](#)

⁵⁰ *Walker v. Ritchie* [\[2005\] O.J. No. 1600](#)

In my view, this states the principle in *Finlayson* too broadly. Both before and after *Finlayson* this court has approved the award of substantial premiums on top of solicitor and client costs. See for example *Roberts v. Morana* (2000), [49 O.R. \(3d\) 157](#) (C.A.) and *Jack (Litigation Guardian of) v. Kirkrude*, [\[2002\] O.J. No. 192](#) (C.A.). I agree with the analysis of *Finlayson* by the trial judge (Kurisko J.) in *Jack* [2000 Carswell Ont. 4969 (S.C.J.)] at paragraphs 74 to 78. As Kurisko J. points out, there is no mention in *Finlayson* of the degree of risk assumed. To the contrary, in *Finlayson*, liability was admitted and the only issue was the amount of damages. Further, the only basis for the claim for a premium in *Finlayson* would seem to have been the private arrangement between the plaintiff and her solicitor. There was no such arrangement in *Jack* or in this case. This court upheld the decision of Kurisko J.”

In my view, it is open to a trial judge to award a premium on solicitor and client costs in a proper case because of the risk assumed and the result achieved. This is such a case. It is the kind of case that counsel undertake at some financial risk to provide impecunious plaintiffs access to the courts. This respondent was impecunious. Her counsel received no fees whatsoever through trial. They carried significant disbursements from the outset of the litigation. The case was complex and counsel achieved an outstanding result. This was, therefore, a proper case to award some premium.”⁵¹

The *Walker v. Ritchie* case as indicated by the trial judge was complex. The parents had the burden of proof to prove Stefanie’s education plans after

⁵¹ *Walker v. Ritchie* [\[2005\] O.J. No. 1600](#)

grade twelve. Their evidence was well thought out and presented. Although there were precedents on both sides the statistics for future income were based on all university graduates not just female graduates. The courts do not allow unsupported negative adjustments for woman's age earning profiles into the future due to Canada's Employment Equity Act, pay equity and the narrowing of male/female wage differentials. The damages for loss of income were awarded accordingly.

In this case the Judge assessed Stefanie's future earnings stream at the level of a minimum wage earner. The defendants' did not disagree. I note had she had better prospects Christopher Bruce devotes chapter 8 of his book to the earnings prospects of the disabled. He cautioned anyone involved in the trial of a personal injury action to closely examine and question the validity of any statistics on the earning prospects of the severely disabled presented by the opposing expert. Certain studies used data gathering and reporting techniques that were questionable statistically and were unreliable.

The loss of income calculations in this case could not have been completed by input into an Internet template.

In addition I refer to the following article concerning an accident involving a 22 year old woman found in *The Canadian Insurance NEWS* November 15, 2004. The headline *SETTLEMENT IN PERSONAL INJURY CASE BELIEVED LARGEST IN CANADIAN HISTORY*

\$12.98 million was awarded to a plaintiff in an out of court settlement. No specific details were provided on how this award was calculated.

The injured plaintiff Laura May Browne a Peterborough Ontario woman was rendered a quadriplegic and mute following a 1997 single motor vehicle accident. Ms. Brown was 22 years old, one of three passengers in Mr. David Lavery's Primus Automotive leased vehicle. Mr. Lavery was convicted of dangerous driving after he lost control of the automobile and skidded across the roadway and landed in a ditch on its roof. Ms. Browne was ejected from the car and found unconscious about 50 meters from the car. She suffered serious brain injuries and a fractured pelvis.

Hospital stays included Peterborough, Toronto and then back to Peterborough, where she lived for a year. She was transferred to a Hamilton Hospital for rehabilitation and then Peterborough Regional Health Centre until a custom home was built for her and her family in 2001 to provide for her special needs.

Since the case was settled outside of court the accounting for the damages will never be made public.

The settlement is unusually high for Canada. The Toronto Star, December 7, 2004 reported almost \$ 3 million will come from the \$1 million liability policy and no fault accident benefits from the driver's State Farm Insurance Policy. The balance was paid by the insurance company for Primus Automotive Financial Services Canada, which is a subsidiary of Ford Motor

Company. The leasing company owned the car Mr. Lavery was driving and was responsible for the driver's negligence under the Highway Traffic Act. The leasing company has high insurance coverage or deep pockets which was available for the damages settlement. This case is a precedent in similar circumstances only if the defendants include a large company with a hefty insurance policy.

The goal in the damages awarded is to put the plaintiff back in the same position as if the accident had not happened. The courts have recognised the rights of individuals to live independently, in their own homes not just in a hospital or long term care facility. However the limitations are the upper limit available from the defendants. I do note lawyers take on personal injury cases based on contingency fees when their client's are non pecuniary.

The following table summarizes the previous two cases.

	Walker v. Ritchie Ontario[2003]O.J. No. 18	Browne(Litigation guardian of) v. Lavery Ontario Out of Court Settlement
Date of Accident	April 17, 1997	1997
Judgement/Settlement Date	January 3 and June 4, 2003	October 2004
Plaintiff	17 year –old female	22 year old
Nature of injuries	Head Injuries/paralysis	Brain injury/Quadriplegic
Occupation pre accident	Student	Unknown
Future Care Costs		**
Position Post Accident	Minimum wage	Unemployable
Life Expectancy		**
Past income lost / Future Loss of Income and costs of future care	January 3, 2003 \$1,421,225	**
General Damages	\$ 250,000	**
Family Law Act Claims	Mother 65,000,Father 50,000Sisters x 3 \$ 45,000	**
Total	\$4,959,901.00 damages/interest	\$12, 980,000 00*

Awarded Costs	\$490,167.90 legal plus premium of \$192,000.00	Unknown
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*Believed to be one of the largest settlements in Canadian history

** Included in final settlement

8.0 Detailed Findings Wrongful Death

The family and dependants of the deceased suffer a pecuniary loss as a result of the tort.

The pecuniary loss suffered by the family depends on the deceased disposable income and how the deceased income was split up amongst the family.

Hedonic Damages

When planning improvements to highways and hospitals, governments had the task of placing value on human beings. \$3,000,000 per person was arrived at by several techniques. This approach applied to personal injury claims was called Hedonic Damages. It received some support in certain jurisdictions in the United States in the 1980s. This practise has disappeared except for a small number of states.

Income-earning Capacity

Income-earning Capacity must be adjusted for elements such as income taxes and dependency rate.

Income Taxes

To calculate disposable income, deduct income taxes and all other appropriate deductions (Canada or Quebec Pension Plan, Employment Insurance, union dues, c pension contributions) from the earning capacity of the deceased. After-tax income is based upon the income tax rates and exemptions currently in force.

Dependency Rates

“Where the deceased is the only income-earning spouse, the courts attribute 70% of the deceased's disposable income to the family unit's consumption, and the remaining 30% to the deceased's own consumption. The 70% allocation is increased by 4% for each child under the age of 21, if the child(ren) is still attending school and dependent upon the family. An IFA must ensure that the assumptions adopted in calculations are reasonable and appropriate in the circumstances based on the facts of the specific case.”⁵²

⁵² LESSON IV DAMAGES SUFFERED BY INDIVIDUALS Litigation Support Advanced Topics page77

Cross Dependency

Where both spouses earn income, calculations are more complex. A method that has been adopted by the courts to account for the shared consumption of income is to raise the level of personal consumption of the deceased from 30% to 40% and lowering the dependency rate from 70% to 60%.

Other Damages

“Other damages sought by a plaintiff, such as compensation for the loss of household services that would have otherwise been provided by the deceased person, must be accounted for. In addition to personal injury contingencies, the contingency of remarriage is unique to fatality cases. In the event of remarriage, a surviving spouse may be in a better or worse situation (depending on the wealth of the new spouse). However, it has been very difficult, in practice, to apply general rules to such a personal matter as remarriage and, therefore, it is either ignored as a contingency or is dealt with as a percentage deduction from any award. The possibility of an eventual divorce if the wrongful death did not occur must also be contemplated.

Differences arise in the computation of the present value factors associated with future losses in fatality/wrongful death cases, however, since personal injury cases consider only "single-life" mortality rates, whereas two-life expectancies are relevant in spousal claims. Thus, the joint life expectancy of

the spouses is the appropriate mortality upon which to base the loss calculations in wrongful death cases.”⁵³

Gross-Up for Income Taxes

A lump sum will be invested to produce investment income that will fund the future income stream being substituted by the award. The investment income will be taxed upon receipt; therefore a gross-up for income taxes should be added to the award.

The following questions were prepared by Economist C. Bruce from the web site www.economica.ca:

Information required to complete an assessment for an estate claim (deceased adult)

We have outlined below the information which we typically require in order to complete an assessment for a loss of income claim by the estate of a deceased person (under the Survival of Actions Act).

- *The deceased’s date of birth and date of death.*
- *The scheduled trial date, or the date which we should use as an “assumed settlement date.” A settlement date is necessary to provide a “point of reference” for our calculations.*
- *The deceased’s income tax returns. Ideally, we would like to have tax returns from at least the last four or five years before the accident. At a minimum, we need estimates of the deceased’s employment income at the time of the accident.*
- *We would like to know what level of education the deceased had.*

⁵³ LESSON IV DAMAGES SUFFERED BY INDIVIDUALS Litigation Support Advanced Topics page77

- *Information concerning the deceased's employment history. Specifically we would like to know what jobs had been held, what the wages were with each employer, whether the deceased was part-time or full-time, amount of overtime worked, and so forth. Also we would like information regarding employer-provided fringe benefits (including pension). Of course, this information is most important for the job(s) held immediately before and at the time of death.*
- *We would like information regarding what the deceased's future employment plans had been. For example, were there plans to change jobs? Would the hours worked have increased or decreased? Were there any likely promotions in the future? Were there any plans for retirement? Any letters received from the deceased's employer(s) relating to these issues would be useful.*
- *If available, please provide portions of Examinations for Discovery transcripts which deal with any of the above topics.*

To summarize, we require any information which relates to what the deceased's career path (and income potential) would likely have been if the accident had not occurred.

Information required to complete an assessment when the deceased person was a minor or young adult

We have outlined below the information which we typically require in order to complete an assessment for an estate claim (under the Survival of Actions Act), when the person who was killed was a minor or young adult.

- *The deceased's date of birth and date of death.*
- *The scheduled trial date, or the date which we should use as an "assumed settlement date." A settlement date is necessary to provide a "point of reference" for our calculations.*
- *What level of education did the deceased have, and how successful had he or she been in school?*
- *We would like information regarding what the deceased's future education and/or employment plans had been. In addition, we would like any available reports that discuss the deceased's academic and/or employment potential.*
- *Since the deceased was a minor/young adult, our loss of income assessment may rely partially on the education and career paths of the immediate family. Therefore, we would like information regarding the education levels, occupations, and earnings of the immediate family, particularly the deceased's parents and siblings.*

To summarize, we require any information which relates to what the deceased's career path (and income potential) would likely have been if the accident had not occurred.

Compensation for Loss of a Fetus

WP 9 Without Prejudice June 2005 Vol. 69 No. 10 Gaspare Di Salvo,BA

This article states the law in Canada does not compensate a woman involved in a personal injury claim for the loss of a fetus. A cause of action can arise after the child is born. The family has the same loss whether the fetus dies before birth or the child dies immediately afterwards. Presently the death of the fetus is not compensatable by damage awards.

In Sukwinder Kaur Virk v. Liberty Mutual Insurance, August 4, 2004, OIC File A03-000023, The Financial Services Commission of Ontario awarded death and funeral benefits for a child who died fifteen days after being born by caesarean section to a woman who was six months pregnant at the time of the injury. Under accident benefits the child was considered a legal person and both a dependant and insured person. The applicant was awarded \$10,020 in death benefits. This decision indicates the evolving issues on the rights of the child who dies after birth the consequence of injuries sustained while in the womb.

The issue for future discussion is should the death of the fetus attract damage awards in tort? If we are to put the pregnant woman in the same position but for the accident we may potentially have a new head of damage.

9.0 Detailed Findings- Other Professionals Providing Templates for Internet Input of Personal Injury Calculations

I have not personally verified whether the following web sites are reputable however an economist and an actuary are offering internet input expert loss calculation reports to the public. The internet web site www.browneconomic.com indicates an economist in Alberta, Ms. Brown, with experience in labour economics and a principal in Brown Economic Consulting Inc., provides “Economic Calculators” for quick estimates of damage awards (not court ready) that law clerks can complete on the internet. The company also provides court ready expert reports when the lawyer needs to retain the expert, often for more complicated claims. Jack Patterson, Fellow, Society of Actuaries, 2000, Toronto, Canada also provides an internet input method at www.actuaryonline.com. The online program does all the calculations and writes a 15 to 20 page damage report for as little as \$600.00. The Internet input looks relatively straight forward and covers the heads of damages in most personal injury claims.

In Alberta, judges in 1999 introduced civil practise note no. 10 (see Appendix B). Most qualified experts in Canada already follow most of the Alberta committee's guidelines which are included in the Practice Aid 95 published by the Investigative and Forensic Accounting Interest Group of the Canadian Institute of Chartered Accountants and the Handbook of the Canadian Institute of Chartered Business Valuators. So this is the issue, can the

calculations be input on the Internet by law firms and insurance adjusters to generate satisfactory personal injury loss reports in most cases? Then the IFA would only be retained in the most complicated cases that do not fit the template.

David Elzinga CA, CFE co-practice leader in the Calgary office of Kroll Lindquist Avey, an international firm specializing in forensic accounting, litigation consulting and business valuation, said the following concerning the Alberta committee's guidelines:

“It's understandable that the committee was concerned about the use of assumptions by experts. But it's essential that lawyers and judges realize that it's often impossible to accurately and fairly estimate losses in complex civil and commercial litigation matters without considering numerous assumptions and other possible outcomes. The courts should not implement standardized guidelines. They are too often inadequate as substitutes for clearly written reports and expert testimony with clearly stated and supportable assumptions.”⁵⁴

10.0 Detailed Findings- The team Approach and the Expert Witnesses Involved in Personal Injury Cases

“There are a number of players on a successful litigation team, each with particular skills and roles.”⁵⁵ The lawyer directs the team requirements and deadlines always ready to entertain settlement negotiations since over 90% of

⁵⁴ THE LAWYERS WEEKLY
Vol. 19, No. 34

January 21, 2000 ALBERTA GUIDELINES COMMITTEE ASSUMES ALL ASSUMPTIONS ARE THE SAME David Elzinga CA, CFE is the co-practice leader in the Calgary office of Kroll Lindquist Avey, an international firm specializing in forensic accounting, litigation consulting and business valuation.

⁵⁵ Smith, Ronald. “Accounting For Damages” page 21

personal injury cases settle before trial dates to avoid the high costs of courts. If the claim proceeds to court, based on the totality of evidence presented by the plaintiff, defendant, IFA and other experts, and jurisprudence the court then awards case specific damages to the plaintiff according to general heads of damages that were outlined in this paper.

“EXPERT WITNESSES:

226 A comment should be made about expert witnesses. Vern Krishna, former Treasurer of the Law Society of Upper Canada wrote an article commenting on experts in long trials. The following were the pertinent parts.

As commercial trials become more complex, lawyers must increasingly rely on experts to explain scientific, financial and tax matters to trial courts. Most commercial litigation requires expert testimony on business valuation and tax issues. The purpose of expert testimony is to assist those trying cases to make an informed judgment by providing special knowledge that the ordinary person would not know

In theory, the expert is an impartial witness and not beholden to the party who retains him or her. In fact, some experts are partisan and beholden to their retainers. This minimizes their value as assistants to the court.

Courts generally allow expert testimony based on relevance, necessity and the qualifications on the expert. The cornerstone of such testimony is the independence of the expert. Where the court cannot rely on the impartiality of the expert, the trial becomes a battle between opposing experts, each carrying the banner for their retainers.

An expert is not a hired gun. Regardless of who pays the expert, his or her primary duty is to the court and not to the client. Unfortunately, it is difficult

for the expert to eradicate from his or her mind exactly who was doing the feeding. There are no easy solutions to resolving the hired gun problem.”⁵⁶

As per Nick Angellotti *the role of the expert is to assist the trier of fact and not to be an advocate of the party that engaged the expert.*

The following excerpt of a table prepared by Nick Angellotti "Civil Court Procedures and Their Relevance to Expert Witnesses, Including Investigative AND forensic Accountants" for his Difa Thesis June 23, 2003

Issues	Ontario Canada
Judge’s ability to control expert witness testimony	Judge has the ability to refuse expert witness testimony after a voir dire and consideration of jurisprudence.
Duty of the expert	Expert has a primary duty to the court before party that pays fees.
Role of the expert	To assist the trier of fact.
Use of Joint Experts or court appointed experts	Judge may appoint independent expert to testify on expert issue. Parties attempt to agree on the expert used.
Expert Report requirements	Rules require time deadlines only. The content is governed by jurisprudence.
Cooperation between experts	Not legislated, but usually occurs at mandatory mediation or arbitration prior to trial.
Limitation to number of expert witnesses at trial	Limited to 3 except with leave of judge which is usually granted.
Pre-Trial Process	Exchange of expert reports and mandatory mediation and arbitration for certain claims.
Procedural rules have been changed/reformed since 1990	Mandatory mediation rules and jurisprudence in 1994 major case R. v. Mohan.

The table of expert witnesses involved in Personal Injury Claims can be found in the Table A.

Bruce best summarized who is responsible for what:

“To avoid such confusion about the roles of the various experts (including counsel), I believe that the preferred rule is the one that is easiest to apply: namely, experienced experts may be allowed to recommend courses of action

⁵⁶ Vern Krishna, former Treasurer of the Law Society of Upper Canada wrote an article commenting on experts in long trials

to experts from other disciplines, but no expert can be held responsible for information that lies outside the expertise of his or her own discipline.”⁵⁷

“75 Some of the qualities that are important to consider when choosing which expert to use from the three categories (accountant economist or actuary) are price, whether the expert will wait until the conclusion of the case for payment, a willingness to attend meetings to discuss and provide input on the theory of the case, thoroughness of research, how the expert will present in the box to six jurors, the quality of the expert's visual material for presentation to the jury (reports cannot be filed, but schedules certainly can, and unless the schedules are easy to understand, they will be of little help to the jury), whether as few people as possible from the expert's office will be working on any given claim, and how the person will fare on cross-examination (for example, an economist may be willing to give away 10 percent of the claim for future loss of income for negative contingencies more readily than an accountant)”⁵⁸

The CA's Role as Other than an Expert Witness

As per the practise AID 95-01 5.3.3 page 23 the CA may be retained in a capacity other than testifying as an expert witness. The IFA's function could be to provide objective assistance to assist in identifying the cases strengths and weaknesses or to develop strategy against the opposing side. The function may also be to give advice regarding the pros and cons of the client's case.

No opinion should be provided, and the client can utilize the suggestions or not. This may tend toward the role of an advocate. In many circumstances it would appear to be a conflict to act as a client advisor and also serve as an expert at trial.

⁵⁷ Bruce Text page315

⁵⁸ Strategies for Maximizing Future Loss of Income by John A. McLeish of Loopstra, Nixon & McLeish October 4-5, 1996 paragraph 75

11. Detailed Findings Comments on Insurance Industry in 2005

“The 2004 financial returns of Canadian insurers were boosted to unprecedented level of profitability by mainly a strong underwriting recovery in the notorious auto line. And the first quarter 2005 financial results of companies suggest that auto business continues to offer a healthy operating margin.”⁵⁹ This is in contrast to the underwriting losses sustained in 2001 and 2002. The insurance act recent changes under bill 198 regulations (keeping the Promise for a Strong Economy Act), legislated new provisions for injured claimants, summarized in Appendix A. This Act was intended to reduce claims by an estimated 15% and therefore enable the insurance companies to reduce insurance premiums charged. The full effect of this new legislation will not be fully understood until the automobile accidents dated on or after October 1, 2003 reach the courts. The two-year limit for filing these claims is October 1, 2005. Several property and casualty insurers over the last five years also reviewed costs of their own experts and consultants. There is continuing pressure on hourly limits for lawyers, accountants, independent adjusters, medical service and other experts. The pressure is also evident in the court system to reduce the time to resolve a claim and reduce costs. The dilemma is how do we treat the claimant fairly and do quality work while the cost constraints are so great.

In addition on January 1, 2004 the Insurance industry was affected by the Personal Information Protection and Electronic Documents Act. The writer

⁵⁹ Van Zyl, Sean. , Canadian Underwriter May 2005

holds a Private Investigators Licence and is an officer in a Private Investigation Agency in Ontario. Comments are based on the experience of that small agency. Private Investigation assignments from several large Insurance companies were severely restricted for about six months until guidelines for privacy were established. Since then several large insurance companies chose to deal with less Private Investigation vendors in order to maintain a volume of work to these preferred vendors in return for contracted lower fees.

12.0 Conclusion

As indicated in the recent advertising campaign to insurance professionals, when determining the facts and quantifying losses ‘Trust your claim to a CA IFA’. CA IFA’s have the training, credibility, and financial expertise of Chartered Accountants, plus years of experience in the investigative and forensic accounting field. We should increase our profile on the Internet to provide these services. On the Internet presently, actuaries and economists claim to be able to complete personal injury loss calculations for insurance companies and lawyers.

The team of experts approach to calculating personal injury claims will reduce costs in the long run.

There are many measurement uncertainties in quantifying losses due to personal injury. There are emerging issues on approaches lost years, gender specific wage statistics, damages for loss of a fetus; and loss of interdependent relationships. The courts rule inadmissible reports from

experts who take the duty to their client who pays them, and provided them the facts, over the higher duty to the court. The expert must remain objective but it is very difficult balance to maintain.

The summary detail findings are detailed in section 3.0 of this paper.

13.0 Bibliography/ Documents Reviewed and Relied Upon

The author reviewed and relied on textbook materials, journal articles and paragraphs from legal judgements as listed in the bibliography below.

Bibliography

Anderson, C with Bruce, Christopher. "Using family background to Predict Educational Attainment in Canada." The *Expert Witness* Newsletter Autumn 2004 Vol. 9, No. 3 Retrieved on July 17, 2005,

Angellotti, Nick. "Civil Court Procedures and Their Relevance to Expert Witnesses, Including Investigative and Forensic Accountants." *Diploma in Investigative and Forensic Accounting Program*, 2003

Bogoroch & Associates . "Bill 198 brings significant changes to automobile insurance claims." *Bogoroch & Associates*. Retrieved July 17, 2005, from <http://www.bogoroch.com/articles/lawyersweekly-bill198.php>

Bogoroch & Associates . "INSURANCE ACT: Recent changes in a nutshell" *Bogoroch & Associates*. Retrieved July 17, 2005, from <http://www.bogoroch.com/newsletters/bogoroch-litigation-bulletin-jan2004.pdf>

Brown, Carla. "Alberta Civil Practise Note 10." *Brown Economic*. Retrieved July 17, 2005 from http://www.browneconomic.com/practise_note.html

Brown, C. "Checklists." *Brown Economic Consulting Inc*. Retrieved July 17, 2005 from <http://www.browneconomic.com/checklists.html>

Brown, Carla. "Economists & Actuaries in Civil Litigation: What does each Discipline offer?" *Brown Economic Consulting Inc.*. Retrieved July 17, 2005 from <http://www.browneconomic.com/CBLEconomists%20andactuaries&%20.pdf>

Bruce, Christopher J. *Assessment of Personal Injury Damages, Fourth Edition*. Markham. LexisNexis, Butterworths, 2004

Bruce, Christopher. "Consulting Services Below are links to lists of information we require in order to prepare our assessments". Retrieved on July 5, 2005, from <http://www.economica.ca/consult.html>.

Bruce, Christopher. "Forecasting the Rate of Growth of Real Wages (Productivity)" *The Expert Witness Newsletter Spring 2004 Vol. 9, No. 1* Retrieved July 17, 2005, from <http://www.economica.ca>

Bruce, Christopher. "The Reliability of Statistical Evidence Concerning the Impact of Disability." *The Expert Witness Newsletter Winter 2004/05 Vol. 9, No. 4*. Retrieved on July 17, 2005, from <http://www.economica.ca>

Bruce, Christopher. "The Impact of Disability on Earnings: Reliable Data." *The Expert Witness Newsletter Spring 2005 Vol. 10, No. 1*. Retrieved on July 5, 2005

Bruce, Christopher J. & Kerr, William A. "Estimating Farm Income to Determine Compensation in Death or Disability Cases." *The Journal of Agricultural Taxation and Law, Vol. 9, No. 3, Fall 1987 (Reprinted Spring 2004 www.economica.ca)*, 254-263. Retrieved July 17, 2005, from www.economica.ca

Canadian Insurance ENEWS November 15, 2004. "SETTLEMENT IN PERSONAL INJURY CASE BELIEVED LARGEST IN CANADIAN HISTORY." retrieved on June 10, 2005 from the <http://www.cdnins.com/gopher.php?>

Debenham, David. "Goodbye and Hello to the Company Accountant in the Courtroom: Expert Evidence in the Twenty-first Century." *THE Balance Sheet WINTER 2004* , Page 2-6

DIFA Litigation Support II –Advanced Topics. "LESSON IV DAMAGES SUFFERED BY INDIVIDUALS." Page 66-77

Di Salvo, Gaspare. "Compensation for Loss of a Fetus"

WP 9 Without Prejudice June 2005 Vol. 69 No. 10. Page 8-17

Durrani, Saqib. "Assessing the Loss of Income for a Self-Employed Claimant." *WP Without Prejudice March 2005 Vol. 69 No. 7,* Page 16-21

Off Web NexisLexis Personal Injury NetLetters, Butterworths Personal Injury NetLetter BPIN.

Insurance Act. Ontario Regulation 461/96 Amended to O. Reg. 381/03

Investigative and Forensic Accounting Interest Group. (1995)

Practise Aid 95, CICA An Introduction to Investigative and Forensic Accounting Practise Issues

Madras, Eva. "Future Care Cost Analysis: Assessing and Quantifying Future Needs." *Without Prejudice February 2005, Vol. 69, No. 6*, Page 66-69

Marcovitch, Daniel. "Future Pecuniary Damage Claims: Weapons of Mass Deception?" *Without Prejudice Vol. 69, No. 5, January 2005*, Page 22-25

Patterson Jack. Fellow Society of Actuaries, Toronto Canada provides an internet input method, Retrieved July 17, 2005, from <http://www.actuaryonline.com/brsteps.htm>

McLeish, "John A. Strategies for Maximizing Future Loss of Income." *** of Loopstra, Nixon & McLeish October 4-5, 1996 paragraph 75

NexisLexis Cases:

Arnold v. Teno, [1978], Andrews v. Grand & Toy Alberta Ltd, [1978] and Thornton v. Board of School Trustee of School District No. 57 (Prince George), [1978]

Colonna v. Mitchell (1997) paragraph 33

Hornick v. Kochinsky [2005] O.J. No. 1629
Shrump et al. v. Koot (1997) 18 O.R. (2D) 337 (Ont. CA)

Hornick v. Kochinsky [2005] O.J. No. 1629

Walker v. Ritchie [2003] O.J. No. 18 Original judgement
Walker v. Ritchie [2005] O.J. No. 1600 April 20, 2005 Appeal

NexisLexis Personal Injury NetLetters, Butterworths Personal Injury

NetLetter BPIN January 1, 2005 to July 13, 2005.

Patterson Jack. (2000). “WHY ARE INSTANTANEOUS REPORTS SUCH GREAT NEGOTIATING TOOLS?” Retrieved July 17, 2005, from

<http://www.actuaryonline.com/whygreat.htm>

Revenue Canada's Interpretation Bulletin IT-365

Smith, Ronald. “Accounting for Damages” 1993 Chapters 1,2,3,5,6, & 7

Van Zyl, Sean. , “Auto Insurance: Will it Bite Back.” Canadian Underwriter May 2005 Retrieved June 23, 2005

http://www.canadianunderwriter.ca/issues/1sarticle.asp?id=164249&story_id