

Research Program: Inquiry into Pediatric Forensic Pathology

The Inquiry has commissioned a series of research papers to assist it in fulfilling its systemic mandate. Some of the leading experts on forensic pathology and the legal system from Australia, Canada, the United Kingdom and the United States have agreed to contribute.

It is anticipated that all the papers will be submitted in draft form by early January, 2008 and posted on the Inquiry's website. The opinions expressed in each paper are those of the author(s) and do not necessarily represent those of the Commission or the Commissioner.

Parties with Standing will be free to make submissions about the papers. It is also expected that some of the experts who have prepared the papers will also testify at the Inquiry, sometimes in panels with other experts.

1) Dr. Stephen Cordner and associates (Victorian Institute for Forensic Medicine and Monash University), *Evolution, Limits and Inherent Frailties of Forensic Pediatric Pathology*

This paper will examine the evolution, limits and problems of forensic pediatric pathology. The paper will define the respective fields of forensic pathology, pediatric pathology and forensic pediatric pathology. It will examine the process of forensic pathology with special attention to the role of the autopsy. It will also examine the development of "evidence-based" forensic pathology. It will then focus on the evolution of pediatric forensic pathology, specifically with regard to sudden infant death syndrome, shaken baby syndrome, Munchausen's Syndrome by proxy, battered child syndrome, falls, suffocation and asphyxia.

2) Dr. Cordner and associates (Victorian Institute for Forensic Medicine and Monash University), *Best Models for Forensic Pathology*

This paper will distinguish clinical medicine with its primary obligation to patients from forensic medicine with its obligations to the legal system and the rights of others. It will examine questions of training, examination and certification of forensic pathologists in Canada in comparison to other systems around the world. In particular, it will examine models of forensic pathology in the United Kingdom and Australia including that at the Victorian Institute for Forensic Medicine. It will also examine standards in forensic pathology, the quality assurance and control measures and consider the appropriate institution to exercise such controls. In addition, it will explore the appropriate relationships between forensic pathologists and bereaved families, police, child welfare officials, prosecution, defence counsel, researchers and the media. The impact of the shortage of pathologists and especially forensic pathologists will be examined. Finally, it will examine best practices for death investigation including information sources prior to commencement of the autopsy, the use of protocols, the writing of reports and preparation and review for testimony in court.

3) Professor Lorne Sossin (University of Toronto), *Institutional Oversight and Accountability of Pathology*

This paper will examine the accountability, oversight mechanisms, institutional, legislative arrangements that have influenced the practice of pediatric pathology in Ontario from 1981 to the present. It will examine the Coroner's Act and, The Office of the Chief Coroner, the role of the Hospital for Sick Children, the role of the College of Physicians and Surgeons, and the role of the Ombudsman. It will explore the evolution of pediatric death investigations in Ontario with a focus on the oversight and accountability of the pediatric forensic pathologists, both those employed by the Coroner's office and those used on a fee for service basis. The paper will also consider the role that affiliation of forensic pathology with teaching hospitals and university departments could have on the oversight, accountability and independence of forensic pathology.

4) Bruce MacFarlane Q.C. (University of Manitoba), *Wrongful Convictions: The Effect of Tunnel Vision and Predisposing Circumstances in the Criminal Justice System*

This paper will examine whether the lessons learned from miscarriages of justice should be applied to the death investigation team, including the interface between forensic pathologists and police, prosecutors and child protection officials. It will explore the predisposing circumstances for miscarriages of justice including the impact of horrific crimes or tragedies, suspects with a record for past bad misconduct, the demeanor of suspects and their 'normalcy' of their reactions to death. Other potentially predisposing factors that will be examined include low socio-economic status, Aboriginal heritage, and mental health issues. The paper will consider the role of tunnel vision and noble cause corruption as explanatory devices for miscarriages of justice and whether they are helpful in assessing the fairness and quality of pediatric death investigations. Consideration will be given to the question of what information the pathologist should receive about possible suspects either from the police or child protection officials, the possibility of bias through irrelevant information and the documentation of the information that flows between various criminal justice actors and forensic pathologists. Attention will be paid to possible remedies to prevent tunnel vision or confirmation bias in pediatric death investigations.

5) Dr. Randy Hanzlick (Emory University and Fulton County Medical Examiner), *Options for Modernizing the Ontario Coroner's System*

This paper will examine the Ontario coroner's system in light of the development of and best practices in American medical examiner systems. It will provide a brief description of the Ontario coroner system and a history of coroner and medical examiner systems in the United States. It will examine issues of funding and per capita costs of death investigation systems, model medical examiner legislation, and the similarities and differences between medical examiner and coroner systems. It will explore issues specific to Ontario including the role of appointed coroners, the role of inquests and the provision of death investigation services in a large province.

6) Professor Kathryn Campbell (University of Ottawa) and Professor Clive Walker (University of Leeds), *Comparative Experience with Pediatric Pathology and Miscarriages of Justice in the United Kingdom*

This paper will examine how expert forensic pathologists are used by courts in England and Wales, and the impact of their testimony on convictions, including several pediatric death cases that have resulted in miscarriages of justice. This will include an overview of how forensic pathologists are designated by various regulatory bodies, as well as a consideration of the limits of their expertise. It will discuss the use of forensic pathology experts by both prosecution and defense and the role of the court (judges and parties) as gatekeepers and/or referees of this expertise. In addition, the paper will explain the relationships between legal processes which adjudge the opinions of forensic pathologists, and the professional regulators which are determining whether a forensic pathologist has failed to maintain professional standards. In particular, the authors will consider the lessons learned from the case of Sir Roy Meadows and his involvement in the cases of Sally Clark, Trupti Patel, and Angela Cannings. It will also allow consideration of the specialized procedures in England and Wales which handled the response to the findings of miscarriage of justice in those cases, including by the Attorney General and by the Criminal Cases Review Commission and other independent inquiries.

7) Dr. Robert Moles, *Networked Knowledge, Australia* and Dr. Bibi Sangha (Flinders University, Australia), *Comparative Experience with Pediatric Pathology and Miscarriages of Justice in Australia*

This paper will examine the issue of qualification, certification and oversight of forensic pathologists in Australia as well as the relationship between the offices of coroner and the chief pathologist. It will compare experiential forensic pathology based on years of experience with evidence-based forensic pathology. It will also compare peer review processes used in South Australia for forensic pathologists and the other forensic sciences including questions of blind and random testing. It will pay particular attention to the coroner's review (largely undertaken by another pathologist but approved by a judicial coroner) of Dr. Colin Mannock's findings that three baby deaths in 1992 and 1993 in Adelaide were the result of natural causes when a subsequent review found significant evidence to indicate that the deaths were non-accidental. In this manner, this paper will determine how faulty forensic pediatric pathology can contribute to false negatives such as false findings of natural death, as well as false positive findings of non-accidental death.

8) Dr. Kathy Gruspier (University of Toronto Mississauga), *Forensic Pediatric Pathology Compared to the Other Forensic Sciences*

The author, a forensic anthropologist with legal training, will examine forensic pathology in comparison to other forensic sciences. It will offer a critical examination of evidence based forensic pathology in comparison to other forensic sciences. It will explore the hypothesis that historically, forensic pathologists have been relied on by the legal system although they have less forensic training, certification and testing than other

forensic experts in part because of their medical training and as well, because the discipline of pathology does not permit the use of double blind testing and other methods of verification that can be used in other forensic sciences. The author will examine how forensic pathologists are qualified as experts in courts in Canada and the United States and the pressures that they face in the adversarial court system to testify about matters that lie outside of their expertise. The paper will also examine how other expert witnesses including clinical physicians often testify along with forensic pathologists in baby death cases and explore the nature and limits of their expertise and steps that can be taken to guard against expert testimony in baby death cases that go beyond the witness's expertise.

9) Professor Gary Edmond (University of New South Wales), *The Role of the Forensic Pathologist as Expert Witness*

The author, an evidence scholar with a background in science, will examine how expert witnesses present science to the court. It will situate forensic pathology in light of ongoing debates about the nature of scientific expertise, independence and objectivity. It will pose the question of whether forensic pathology as a hybrid between law and medicine is differently constituted than other sciences. It will also examine questions of whether there should be competing experts and/or experts appointed by the court. It will examine recent proposals in the United Kingdom, United States and elsewhere for the reform of expert testimony including the use of pre-trial conferences between experts. It will also examine how the science of forensic pathology interacts with the burden of proof in various proceedings -- for example, the reasonable doubt standard in criminal trials and lower burden of proof in child protection proceedings. It will explore how the legal system should resolve adjudicative questions in the face of scientific uncertainty and the sometimes exaggerated expectations of the precision and certainty of science.

10) Professor Nick Bala (Queens University) and Professor Nico Trocmé (McGill University), *Child Protection Issues and Pediatric Forensic Pathology*

This paper will examine child protection issues, in particular, those relating to the safety and best interests of surviving children after a baby's death. It will examine rising awareness of child abuse in Ontario and what is known about the likelihood of subsequent death or abuse after one child in a family has died from non-accidental causes. It will consider the purposes and processes of the child welfare system and the range of dispositions open in child welfare proceedings including options short of full apprehension. It will also review the interaction of child protection proceedings with criminal investigations and prosecutions in baby death cases including questions concerning the admissibility of both bad conduct and forensic pathology evidence in child protection proceedings. Some attention will be devoted to the particular circumstances of Aboriginal people and their involvement with the child protection system.

11) Professor Christopher Sherrin (University of Western Ontario), *Defence Representation and Defence Experts in Baby Death Cases*

This paper will examine defence representation including legal aid funding in criminal cases arising from pediatric death. It will explore whether there is sufficient funding for and the availability of competing expertise in the area of forensic pediatric pathology. It will also examine ethical and legal questions concerning the entry of guilty pleas (or the refusal to challenge evidence presented by the Crown) to manslaughter, infanticide or other lesser included offences to murder charges and the implications of a murder charge for the defence in such cases.

Kent Roach, Director of Research