

## W11 Child Homicides: The Critical Role of Interdisciplinary Expert Collaboration

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After attending this presentation, attendees will better understand the main types of pathology seen in child abuse cases, the problems of identifying time sequences, how injuries are inflicted based upon the pathology present, and how law enforcement agencies can use medical and scientific evidence to investigate allegations of child homicide. Attendees will also learn how evidence is presented and challenged in homicide trials in the Canadian criminal justice system and how the Canadian legal system has dealt with undercover police operations and their admissibility as evidence.

This presentation will impact the forensic science community by providing information on different law enforcement techniques and how forensic medical evidence can be integrated into a complex investigation of a difficult and often contested area of the criminal justice system.

Sudden, unexpected, and/or violent death in childhood is uncommon to rare beyond infancy. Death investigators, forensic pathologists, law enforcement officers, and others faced with the investigation of such fatalities may be challenged by various factors including: (1) an incomplete, changing, or non-factual history of the circumstances of death; (2) complex pathology that cannot easily be interpreted within the vague historical data; and, (3) the reality that some injuries can be explained by non-criminal, unusual, bizarre, or rare activities of daily living that may initially seem implausible.

Well-documented public failures in pediatric forensic pathology have resulted in a shift in classic child death investigation. That is, while pathologists were often taught to "think dirty" when a child dies, modern wisdom has led to a shift toward "thinking truth." Without any doubt, all individuals involved in a child death investigation have a desire to reach factual, defensible conclusions and, within their roles, serve the public that pays for their services. Pediatricians, child protection services members, and law enforcement officers are, in general, advocates for "victims," and in that role, have distinct functions meant to protect other children and the public from real or potential harm. Forensic pathologists are in a somewhat unique role in that they are not advocates for any victim, person, family, or agency. Rather, they are advocates for science. It is this delicate relationship between "advocates" and the "non-advocate" forensic pathologist that will be explored in detail through case study, emphasizing the powerful partnership that can be developed through interdisciplinary collaboration, including, importantly, the use of so-called "hold-back evidence."

This presentation will review the modalities of death in the first decade of life (beyond infancy), with a focus on blunt trauma. Following this Socratic-style review, the presentation will shift to a single case study, the death of MJ, a 6-year-old girl who was found unresponsive at home with multiple injuries, and who later died in the hospital. The case study will revolve around the crucial and delicate relationship between a consulting forensic pathology expert and law enforcement officers, and will include a formal discussion concerning the oblique role for forensic pathology in a so-called "Mr. Big" undercover operation — a Canadian technique used in a number of different types of crime.

The independence of forensic pathologists, coroners, and medical examiners from the criminal justice system is a fundamental tenet of death investigation. When political and other influences are allowed to color medical opinions, a "truth seeking" paradigm cannot exist. That said, beyond the data sharing typical among agencies that investigate death, collaboration between an "expert" forensic pathologist and an investigative agency can promote and enhance the truth-seeking model and promote accuracy within the entire "system" of child death investigation.

## Child Homicide, Expert Evidence, Undercover

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