



### E43 Forensics for the Defense

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After attending this presentation, attendees will be presented three (3) cases involving complex medical and legal issues beyond the typical scope of homicide trials. The benefit of deconstruction and differential diagnoses are used to evaluate and test prosecution claims; realizing initial medical opinions are sometimes made using bad facts, superficial observations or lack of research. To remedy this requires an integrated approach to investigation which will establish strong points for the defense.

This presentation will impact the forensic science community by proving a better understanding of the value of integrating the forensic and medical sciences into investigations and their contribution to the provision of justice.

**Case One:** Alleged Shaken Baby Syndrome - The manner of death for this child was determined to be homicide by the medical examiner who accepted verbal turnover reports from physicians at an advanced pediatric hospital that the child suffered non-accidental trauma. Highly manipulated laboratory data, inappropriate for this circumstance was used to indicate a normalcy for this child's laboratory report. The channelized thinking that followed produced an absence of inquiry into the child's significant past medical history. Four physicians were prepared to testify to the non-accidental nature of the child's injuries. The father was tried for murder in the first degree, but was resolved by diversion.

**Case Two:** Homicide vs. Accidental - A young couple with a shared history of alcoholism and adultery entered into a domestic dispute resulting in the woman being forced to sleep in their garage. Some physical violence was admitted by the husband and a delay of treatment after discovery occurred while the spouse sought informal medical assistance. At trial the prosecution maintained all injuries were the result of deliberate violence despite a seriously flawed autopsy, inadequate documentation and failure of the treating physicians and the medical examiner to recognize a chemical pattern of derangements in the victim sufficient to cause death. The husband was convicted of second degree murder.

**Case Three:** Homicide vs. Suicide - An older couple with a history of domestic discord was investigated by police as a homicide, despite the adamant denials of the surviving husband. He was originally charged with second degree murder during a preliminary hearing, but the prosecution elevated it to first degree via the grand jury. Past discord and bad acts were given great authority despite an absolute dearth of evidence towards homicide, missed investigatory efforts, and disregard of exculpatory evidenced coupled with interference by the prosecution with the defense expert. The case resulted in a conviction for criminally negligent homicide, the lowest of any charge involving death.

Jurists for the defense are often faced with a prosecution theory developed through its endless resources of money, facilities and experts. But there are times when defense experts may broaden the view of the case and significantly impact the outcome, both at trial and in the appellate phase. The focus is on the process of deconstructing the proffered case by assessing the strengths and weakness in the state's use of its forensic capabilities; the need to develop sound differential diagnoses and alternative explanations, and ensure the standards of care have been met.

#### Forensics, Ethics, Deconstruction