



### F26 Expert Challenges Using Industry Standards

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**Learning Overview:** After attending this presentation, attendees will understand: (1) there are objective standards for the knowledge required of experts in many forensic disciplines, (2) too many practitioners who hold themselves out as experts do not meet the minimum criteria for professional qualifications, and (3) a qualifications challenge is more easily crafted and more likely to succeed than a methodological challenge.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by showing that challenging an expert on methodological grounds is often more difficult than simply challenging the expert's qualifications.

Federal Rules of Evidence (FRE) Rule 702 (and most states' Rules of Evidence) states, "A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case."

Confronted with the possibility of challenging an expert opinion, most attorneys base their challenges on the four lettered requirements and are required to get into the weeds with an expert on the subject of methodology. Given the wide variety of forensic science disciplines, this places the lawyer in an almost impossible situation of arguing methodology with someone who is far more qualified to discuss methodology.

A strategy that is more likely to succeed is using the opening phrase of Rule 702 to challenge the qualifications of the expert. This does not require the attorney to go beyond learning what are the expectations of the discipline for training and knowledge. In some forensic disciplines, challenging qualifications will be difficult, but in others, it is the easiest means of persuading the court (or adverse counsel) that the expert will not be helpful to the trier of fact.

With respect to arson cases, unless an attorney specializes in insurance defense, he or she is likely to encounter one or two contested arson cases in a career. This necessitates consulting with an expert, but even a brief consultation will make the attorney aware that there exists an industry standard for the knowledge required to investigate fires.<sup>1</sup> Thus, the question becomes not "How did you reach your opinion?" but rather "Are you really qualified to express an opinion?" Per experience, the unfortunate answer to the second question is "No"—not if any kind of objective standard is consulted. A large cadre of supposedly professional fire investigators cannot explain the basic concepts of energy, power, heat flux, and fire pattern development. For example, there are many fire investigators who will be unable to tell you that a watt is 1 joule per second or explain the difference between energy and power or tell you the units used to measure radiant heat flux. When sponsoring counsel understands that their expert, who is likely to be the pivotal witness in a case, cannot demonstrate qualifications in even the most basic fire science, charges are likely to be dismissed or civil cases are likely to settle. No formal challenge is even necessary. If the court still allows the expert to testify, the jury will at least understand that they are hearing opinions from an unqualified individual.

This presentation will provide several examples of individuals who failed to demonstrate that they were even marginally qualified, and thus civil cases were settled or criminal cases were dismissed outright.

Several disciplines besides fire investigation (drugs, bloodstains, DNA, computer forensics) have adopted training guides or other documents that define the qualifications that experts should possess, and these can be used in a similar fashion.

#### Reference(s):

<sup>1</sup>. NFPA (2014), NFPA 1033, *Standard for Professional Qualifications for Fire Investigator*, Quincy MA, National Fire Protection Association.

#### Industry Standards, Qualifications, Challenge