



### A29 Legal vs. Scientific Proof: And Never the Twain Shall Meet?

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After attending this presentation, attendees will: (1) understand the definition of legal proof and scientific proof; (2) understand the difference between the two kinds of proof; (3) understand the criteria for proof that forensic scientists need in court; and, (4) understand the criteria for proof that attorneys need to establish in court.

This presentation will impact the forensic science community by providing an opportunity for dialogue between the forensic science and legal communities so that they can have a better understanding of each other's criteria for proof in court.

In a criminal case, the goal of the prosecutor is to prove that the accused is guilty of the crime(s) charged, including all of the elements of each crime. The prosecutor must prove his case "beyond a reasonable doubt." If, in a murder trial, a gun possessed by the accused was suspected of firing the fatal bullet, the prosecutor's task is to prove that the fatal bullet was fired from the weapon. If the accused deposited blood at the scene of the murder, the prosecutor must try to prove that the blood came from him. This trial is going on in real time and the evidentiary questions must be answered with today's knowledge, now. Naturally, this begs the question: what constitutes proof beyond a reasonable doubt?

Science, including forensic science, doesn't see things in the same way as the law. Science is a constantly moving target. As scientists do research, more data is collected and conclusions may change. As science advances, so does the ability of forensic scientists to associate items of evidence with people or objects. What was true 25 years ago may not be true now. For example, back then, there was no way to reliably associate blood evidence with one particular individual. Today, DNA typing has made that possible. What will happen 25 years hence? For many years, it has been accepted, almost without question, that a bullet can be traced to a particular rifled weapon. Now, these conclusions are being questioned. All of this means that the concept of scientific proof changes as advances in science change, but the concept of legal proof doesn't change. All of the elements of a crime must still be proven beyond a reasonable doubt. Obviously, the particular elements that must be proven are unique to each case.

This program will examine the issues of legal and scientific proof. Is there a clear understanding of the two types of proof among the actors in the adjudicative process including the scientists? What are the best ways of reconciling the problem of legal proof being an immediate, static set of requirements, whereas the elements of scientific proof of a given concept change with time? How does this impact the appeal of adjudicated cases?

To get at these and related questions, we are convening a panel of distinguished experts in the legal field and in forensic science. They will be given a series of questions that will hopefully get at the issues of proof. Time permitting, questions will also be accepted from the audience.

**Legal Proof, Scientific Proof, Attorney**