



Criminalistics Section – 2004

B40 Forensic Scientists at the Crime Scene: Lab Directors' Perspective

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After attending this presentation, attendees will understand that science does not start at the laboratory door. From a laboratory director's point of view there is a need for scientific assessment of physical evidence from the scene until trial.

This presentation will impact the forensic community by helping to bring into open discussion the need for the scientist at the crime scene.

For too long the crime scene has been viewed as an entity unto itself that can be properly handled as a separate issue from laboratory analyses. This is a regrettable abridgement of the scientific continuum (crime scene to trial testimony) that has existed for a number of reasons that are primarily bureaucratic or political.

Almost all physical evidence generated in casework is dependent on the competency of the process used for this purpose. Since this is, in essence, the foundation for which all the other case examinations are built, how can it occupy a less important position in the hierarchical ladder of evidence? The reliability of all analyses that are conducted subsequent to the crime scene can be no more reliable than the work done at the scene. How important are the things that are not detected at the crime scene? What impact could these items have on the outcome of a case? The evaluation or interpretation of all data generated by all the lab analyses cannot be of any more value than that gleaned from the crime scene, i.e., the crime scene is the limiting factor in all cases. Simply stated, the best of laboratory work cannot compensate for a crime scene inadequately handled.

Historically, police department administrators have decided who shall be responsible for processing crime scenes or for conducting crime scene reconstructions. Traditionally, this responsibility has been placed with police officers, acting as evidence technicians, because they are plentiful in number, are readily supervised in quasi-military fashion, and have other built-in advantages for scene security and so forth. Much of this philosophy or approach of utilizing technicians in place of scientists stems from many naive administrators and even forensic scientists incorrectly believing that technology and science are synonymous. It is a common misconception that if technological prowess is achieved or modern gadgetry used that this equates to competent science. It clearly does not.

The use of a scientific approach in investigating major cases crime scenes is critical. It has been stated in a noteworthy forensic journal that the scientific method must be used for crime scene reconstruction. However, it has also been stated incorrectly, in the same journal article, that crime scene reconstruction is not science itself, since it is the application of science to matters of law. Forensic science itself is commonly defined in essentially the same way. Would anyone in the AAFS be willing to admit that forensic science is not science because it is the application of science to matters of law? Can non-scientists be allowed to define forensic science? Can a non-scientist be expected to skillfully employ the scientific method at crime scenes? How do you become skilled in the use of the scientific method and its application to crime scenes? Don't some cases require follow-up experimentation? How are experiments designed properly in the crime scene context by untrained personnel that boast of workshops as the core of their so-called scientific training? What about the philosophy of science? The questioning of one's own findings? Can this be taught effectively in a workshop setting by non-scientists? How can a non-scientist adequately determine what scientific examinations need be done in a forensic science lab in a complex major case.

The above questions will be explored in detail. Several cases will be presented that illustrate and underscore the above concepts. An ideal model for the investigation of crime scenes will be proposed and key recommendations made.

Forensic Scientist, Scientific Assessment, Crime Scene