



### A4 Meeting the Challenge of the NRC Report: Producing Meaningful Mandatory Standards for Forensic Science

John J. Lentini, BA\*, Scientific Fire Analysis, LLC, 32836 Bimini Lane, Big Pine Key, FL 33043

After attending this presentation, attendees will have an appreciation for the standards development infrastructure that already exists within forensic science, and will understand how to get involved in producing additional necessary standards.

This presentation will impact the forensic science community by making it clear that meeting the challenges for standardization proposed by the National Research Council (NCR) Report can be accomplished using already existing infrastructure.

The NRC Report, *Strengthening Forensic Science in the United States: A Path Forward*, recognizes the need for valid standardized test methods and reports, but was critical of the forensic science community for failing to mandate the use of meaningful standards, and critical of some of the standards, especially those developed by SWGs, for being too vague. These are perhaps valid criticisms when the state of forensic science standards is viewed in a vacuum, but it must be noted that as forensic scientists, we usually do just what we are asked.

We are servants of the criminal justice system, and ever since the *Daubert* case was decided in 1993, have been waiting for the judiciary to demand more of us, and for our legislative bodies to fund the efforts required for us to comply. Neither the request nor the funding appeared, though the request to do more seems to be here now that the NRC report has been published.

The forensic science community is quite capable of complying with the demand for meaningful mandatory test methods, followed by understandable and complete scientific laboratory reports. All that is required is the will to use the infrastructure that we have built up over the last twenty years.

There has always been some initial resistance to the idea of laboratory accreditation, but now more than eighty percent of our public sector laboratories are ASCLD-LAB accredited, without any mandates. Certification is available in most forensic science disciplines, and if the courts want to demand that only certified practitioners testify, all that is needed is to find a way to pay for it. Certification is already tied to ethical practice codes of the various certifying bodies (at least those bodies accredited by FSAB). Enforcement of ethics codes could easily be strengthened by making it possible to file a complaint without risking one's life savings.

As for standard test methods, the well-oiled machine, ASTM International has been providing forensic science with credible standards since before *Daubert*, and has been providing most other industries with credible voluntary consensus standards for more than a century.

Working with the SWGs, Committee E-30 on Forensic Sciences has produced over fifty forensic standards, and always has more in the

pipeline. These standards are maintained constantly, and must be reapproved or revised on a five year schedule. There is no reason that the SWGs that have not yet partnered with E30 could not do so now, and no reason that the use of a standardized methodology could not be mandated.

Recognizing that not every test can be anticipated, E30 is now working on a general method describing how to set up and validate new methodologies when the need arises.

It is hoped that the NRC report results in actual legislation that is shaped with the help of the forensic sciences, and actual funding so that its new demands can be compiled with, and respond to its criticisms. If that happens, there is no doubt that we are up to the challenge.

**Forensic Science, Standardization, Infrastructure**