



NATIONAL COMMISSION ON FORENSIC SCIENCE

NIST
National Institute of
Standards and Technology
U.S. Department of Commerce

Forensic Science Curriculum Development

Subcommittee

Training on Science and Law

Type of Work Product

Directive Recommendation

Recommendation

The NCFS recommends that the Attorney General fund the creation of a fair and balanced national curriculum on forensic science issues expected to be brought before courts. This curriculum should be completed within 1 year. This curriculum should be developed initially for judges and lawyers but with a design permitting future adaptability to other audiences such as forensic science service providers (FSSPs), law enforcement, and victims advocates.

Statement of the Issue

Two conditions exist that make clear the need for educational programming on forensic science. First is what has been described as the law's "heavy reliance" on forensic evidence. STRENGTHENING FORENSIC SCIENCE: A PATH FORWARD, 9. The second is at the heart of this proposal: the inability of the consumers of this evidence, be they judges or lawyers, to properly assess and apply this information:

The judicial system is encumbered by, among other things, judges and lawyers who generally lack the scientific expertise necessary to comprehend and evaluate forensic evidence in an informed manner, trial judges (sitting alone) who must decide evidentiary issues without the benefit of judicial colleagues and often with little time for extensive research and reflection, and the highly deferential nature of the appellate review afforded trial courts' *Daubert* rulings. *Id.*, 12.

Recommendation 10 of that report urges that a national forensic institute "support law school administrators and judicial education organizations in establishing continuing legal education programs for law students, practitioners, and judges." *Id.*, 28.

Ample data and anecdotal evidence confirm that the expert witness rules are not well understood by the legal community or forensic science stakeholders. [See, e.g., Moreno, Einstein on the Bench?: Exposing What Judges Do Not Know About Science and Using Child Abuse Cases to Improve How Courts Evaluate Scientific Evidence, 64 Ohio St. L.J. 531 (2003).]

Background

All criminal justice stakeholders, from crime scene to courtroom, can be impacted by technical and legal issues related to forensic evidence. There are many organizations committed to training stakeholders on issues of law and science. These include the American Bar Association, the Federal Judicial College, the American Academy of Forensic Science, many state organizations, and graduate schools as well as other

institutions. However, there is no uniform curriculum, standardized training model, or set of training material on a national level that can be easily accessed.

Officers of the court see forensic issues in both criminal and civil settings. For that reason, it is essential that there be a curriculum that addresses both forensic science and legal issues as they will be presented in court—highlighting the disciplines and their limits. To be perceived as neutral, a national curriculum must be developed by entities independent of the Department of Justice—in particular the National Institute of Standards and Technology (NIST), the American Association for the Advancement of Science (AAAS), and the National Academy of Sciences (NAS). It needs to be completed within 1 year to ensure that training on the new curriculum begin as soon as possible.

It is essential that there be a curriculum that addresses both forensic science and legal issues as they will be presented in court—highlighting the discipline and its limits and reasonably and neutrally presenting arguments that would support or challenge that evidence. To be perceived as neutral, a national curriculum must be developed by entities independent of the Department of Justice—in particular, entities such as NIST, AAAS, and NAS, utilizing subject matter experts both outside of and within forensic disciplines as appropriate. The curriculum needs to be completed within 1 year to ensure that training begins as soon as possible.

Proposed subject matter and disciplines

The curriculum should include but not be limited to:

- The law governing expert opinion and scientific and technical evidence;
- Probabilities and statistics;
- An articulation of the strengths and limitations of forensic evidence, including forensic medicine;
- Issues concerning quality assurance, and FSSP and forensic medicine service provider management, accreditation, and certification;
- Issues related to human factors;
- Specific forensic and social science disciplines likely to come before the courts.

The national curriculum must be assessed for its effectiveness as a teaching tool once drafted and again after its implementation.