*An excerpt from a new book,*Ethics for the Public Service Professional*, written by Aric W. Dutelle*

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**FORENSIC SCIENCE**—the application of science to civil and criminal law—is a field that is grounded in applied ethics. The identification, collection, and preservation of any piece of forensic evidence will ultimately involve numerous individuals. At any step within the process, evidence can be deliberately or accidentally mishandled.

This risk begins at the scene of the crime, where there is the possibility of evidence planting, destruction, or mishandling. After the scene has been processed, evidence is then sent to a forensic laboratory for analysis. Here, it can be subject to contamination through poor testing methods, excess consumption, mislabeling, and even loss or destruction. After the analysis has been performed, those analyzing the evidence must then report on their findings.

Personnel must be accurate and honest when reporting their examination results. There have been instances uncovered where individuals trusted with such reporting have misrepresented their findings, and have even been involved in drylabbing, which is the reporting of results based on forensic analysis, when no test or analysis was ever performed.

These errors, omissions, or completely fraudulent testimonies or reports are of special concern due to the fact that forensic evidence that is testified to or reported on by “experts” is routinely given more weight and consideration by jurors. As a result, false testimony, inflated statistics, and laboratory fraud have led to wrongful conviction in many U.S. states, due in part to jurors’ trust in the system, but with forensic fraud being the impetus.

**Ethics and Forensic Testimony**

As was stated earlier, juries and jurors give increased weight to the testimony of forensic experts. They are correct in doing so in some respects, since criminalistics (the field of forensic analysis) “has as its primary objective a determination of physical facts which may be significant in legal cases.” (Barnett, 2001) Therefore, an ethical analyst has an obligation to the truth—and as such, they have an obligation not to mislead the jury, defense, or the state when testifying before the court, or when preparing their reports relating to their analyses of forensic evidence.

While there exists no single ethical code that applies to all disciplines of forensic science—or to all practicing criminalists—there are two primary organizations that have developed ethical codes relating to forensic testimony and the presentation of forensic analyses within court. The American Board of Criminalistics (ABC) and the American Academy of Forensic Sciences (AAFS) are two of the primary professional organizations for forensic scientists within the United States.

The ABC Code of Ethics requires each certified member to ensure that any opinions rendered with regard to their analyses are done so “only to the extent justified” by the evidence in question, and to also ensure that the testimony given is presented “in a clear, straightforward manner” that in no way misrepresents or extends “themselves beyond their field of competence.” Testimony should be given “in such a manner so that the results are not misinterpreted.” (ABC, 2010)

The AAFS Code is equally as articulate in spelling out the expectation of its members, stating that members shall not “materially misrepresent data or scientific principles upon which his or her conclusion or professional opinion is based.” (AAFS, 2010) An addition to the AAFS Code is a section that lists “Guidelines” for members and analysts. Under this section, it lists that analysts should “adopt good forensic practice guidelines, and that unlike attorneys, forensic scientists are not adversaries. They take an oath in court to tell the whole truth. They should make every effort to uphold that oath. Every reasonable effort should be made to ensure that others (including attorneys) do not distort the forensic scientist’s opinions.” (AAFS, 2010)

**Forensic Science Gone Awry**

The March 2009 issue of the Virginia Law Review included an article entitled “Invalid Forensic Science Testimony and Wrongful Convictions”. This study, conducted by Brandon L. Garrett and Peter J. Neufeld, was the first study undertaken to explore the relationship between forensic testimony and convictions ultimately leading to exonerations based upon post-conviction DNA analysis. The study sought out court transcripts and results for the 156 exonerees who had been identified at that time, with ultimately 137 being located for review. The testimony that was reviewed for the 137 exonerees primarily involved serological analysis testimony (100 cases) and testimony regarding microscopic hair comparison (65 cases), due to the majority of the cases being sexual assaults.

Of those reviewed for this study, 82 of the cases, or approximately 60%, included invalid forensic testimony by prosecution experts, or “testimony with conclusions misstating empirical data or wholly unsupported by empirical data.” According to the article, two basic categories of invalid scientific testimony were recurring themes within the cases reviewed. “1) The misuse of empirical population data. 2) Conclusions regarding the probative value of evidence in the absence of empirical data.”

The six types of invalid testimony that were identified pertained to the following:

Evidence that was non-probative presented as probative;
Discounting exculpatory evidence;
Inaccurate presentation regarding statistics or frequency;
Providing statistics without supporting empirical data;
Non-statistical statements made without supporting empirical data;
Conclusion of evidence originating from the defendant without supporting empirical data.

In a statement made at a hearing before the Committee on the Judiciary, 107th Congress, Senator Orrin Hatch commented on the need to provide new resources for forensic science, while referring to the unethical work of an Oklahoma City forensic analyst, Joyce Gilchrist.

This isolated situation should not be used unfairly to indict the thousands of forensic scientists who perform their work professionally and responsibly. It should, however, remind us that those who work in our criminal-justice system have an obligation to be diligent, honest, and fair-minded.

However, while not attempting to disagree with the Senator’s remarks, what this study found was that it was not necessarily a “few bad apples” that made the bunch bad, and these were not isolated incidents simply involving a handful of analysts. The trials reviewed included invalid testimony by 72 forensic experts, employed by 52 different agencies, in 25 different states. As shocking as these statistics may seem, more shocking is that in the majority of these instances, “defense counsel rarely cross-examined analysts concerning invalid testimony and rarely obtained experts of their own.” In the rare cases in which invalid forensic testimony was challenged or in dispute between the prosecution and defense, “judges seldom provided relief.”

**Ethics at the Crime Scene**

The variety of crime-scene types and circumstances facing forensic investigators produces many ambiguous situations that do not conform to a specific policy or procedure. This, coupled along with the fact that their skills and knowledge in the forensic investigation may assist in establishing the innocence or guilt of a defendant, mandate that professional ethics and integrity be essential to a forensic investigator’s decisions and efforts.

A forensic practitioner’s ultimate obligation is to the truth. He or she must never be biased for or against a suspect in an investigation. Legal, scientific, and ethical values can become tangled in the courtroom; however, the most important aspect of the trial is that the guilty are convicted and the innocent are exonerated (Fish, Miller, & Braswell, 2007). The sole obligation must be to serve the aims of justice. Of ultimate importance is that the forensic practitioner conducted their efforts in a thorough, competent, unbiased manner.

To ensure ethical behavior, veracity of testimony, and professionalism among individuals engaged within the field of crime-scene investigation, some departments and organizations have implemented a code of ethics that an employee must sign and agree to function by as terms of their employment or membership. For an example of one of these codes, the reader is directed to the website of the Inter-national Association for Identification (IAI) to peruse their listed “code of ethics” for certified crime-scene personnel (IAI, 2010). Other examples of codes of ethics can also be located on the IAI website, for various crime-scene related positions.

No forensic investigator wants to live with the possibility that a guilty person escapes prosecution or that an innocent person is punished based on his or her actions or inactions. There-fore, he or she should do everything possible to preserve the chain of custody, take all necessary precautions to prevent cross-contamination or deterioration of physical evidence, and leave the forensic analysis up to the criminalists and the courts. It is up to the judicial system, not the crime-scene personnel, to weigh the evidence and come to a determination of guilt or innocence (Fish, Miller, & Braswell, 2007).

A search of recent cases involving mismanagement, improper documentation, unethical testimony, and improper analysis of physical evidence is bound to bring the searcher a plethora of cases associated with such matters. Of course, these are only a sample of those that made headlines. For each that made the headlines, there are perhaps dozens that did not. Ethics—or lack thereof—has been found to permeate all areas of the criminal-investigative process. With very little research effort, the reader will find that there are ethical transgressions that occur at all steps in the evidentiary process: crime-scene security, physical evidence collection and documentation, physical evidence processing and analysis, testimony regarding all aforementioned phases, and final evidence disposition. These issues are not isolated to particular geographic regions or to particular departments. They are instead a product of training (or lack of) and personal values (or lack of), that can be present in any setting.

An examination of unethical issues relating to crime-scene work shows a variety of motivations for committing unethical acts. Sometimes the motivation is greed; other times, it is power, status, or promotion. But more often it is a case of the individual forgetting that his or her obligation is to the truth and not to one side or the other. Many times individuals feel as though they are members of a particular team (prosecution?), and thus may fail to present testimony or analysis that could prove damaging to the prosecutorial team and would be tantamount to letting the team down. As addressed previously, many times such instances can be avoided through a thorough background investigation, proper ethical training, and correct management practices.

**Conclusion**

Each time a crime-scene investigator responds to a crime scene, or a criminalist performs an analysis, the potential exists that the actions taken and observations made will be presented within a courtroom. Forensic specialists’ reputations are based on the veracity of their work, and the integrity of their actions. Those actions—or lack thereof—become the voice of the victim.

While justice may be blind, the forensic specialist must present objective and unbiased testimony that clearly and accurately recreates the crime scene for the judge and jury. A forensic specialist’s actions should in no way detract from the credibility of the physical evidence, or tarnish its voice.

**About the Author**

Aric Dutelle has a Master of Forensic Sciences degree, specializing in impression evidence, and has been involved in law enforcement since 1999. He is currently the Program Director of the Forensic Investigation program at the University of Wisconsin-Platteville. He is the author of An Introduction to Crime Scene Investigation (2011) by Jones & Bartlett publications, and Ethics for the Public Service Professional (2011) by CRC Press.

**Works cited in this article:**

American Academy of Forensic Sciences, “AAFS Bylaws.” 2010. Online: [www.aafs.org](http://www.aafs.org/)

American Board of Criminalistics, “Rules of Professional Conduct.” 2010. Online: [www.criminalistics.com](http://www.criminalistics.com/)

Barnett, Peter D. *Ethics in Forensic Science: Professional Standards for the Practice of Criminalistics*. Boca Raton, FL: CRC Press, 2001.

Fish, Jacqueline T., Larry S. Miller, Michael C. Braswell. *Crime Scene Investigation*. Cincinnati, OH: Anderson Publishing Co., 2007.

Garrett, Brandon L. and Peter J. Neufeld. “Invalid Forensic Science Testimony and Wrongful Convictions,” *Virginia Law Review*, 2009: 95(1). Online: [www.virginialawreview.org](http://www.virginialawreview.org/)

International Association for Identification, “Code of Ethics for Certified Crime Scene Personnel.” 2010. Online: <http://theiai.org/certifications/crime_scene/ethics.php>

United States. Cong. Senate. Committee on the Judiciary. *DNA Crime Labs: The Paul Coverdell National Forensic Sciences Improvement Act*. 15 May 2001. 107th Congress., 1st sess. Washington: U.S. Government Printing Office, 2002. Online: