Daubert and Criminal Prosecutions
BY PAUL C. GIANNELLI

One aspect of the National Academy of Sciences (NAS) landmark report on forensic science that is often overlooked is the report’s critique of the judicial system: “The bottom line is simple: In a number of forensic science disciplines, forensic science professionals have yet to establish either the validity of their approach or the accuracy of their conclusions, and the courts have been utterly ineffective in addressing this problem.” (Nat’l Research Council, Nat’l Acad. of Sci., Strengthening Forensic Science in the United States: A Path Forward 53 (2009) [hereinafter A Path Forward] (emphasis added.)

“Utterly ineffective” is a devastating condemnation—more so because, in 1993, the US Supreme Court decided Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), a case that was supposed to address the problem of junk science in the courtroom. In Daubert, the court established a new reliability test for the admissibility of expert testimony, one that emphasized the importance of empirical testing. When Daubert was decided, some courts believed that it lowered the barriers to admissibility and thus more expert testimony would be admitted. Yet, over time, the court transformed the Daubert test. By 2000, the court was referring to Daubert as providing an “exacting standard.” (Weisgram v. Marley Co., 528 U.S. 440, 455 (2000).)

Post-Daubert Civil Cases
There is little question that Daubert has had a substantial impact in civil litigation. “The Federal Judicial Center conducted surveys in 1991 and 1998 asking federal judges and attorneys about expert testimony. In the 1991 survey, seventy-five percent of the judges reported admitting all proffered expert testimony. By 1998, only fifty-nine percent indicated that they admitted all proffered expert testimony without limitation. Furthermore, sixty-five percent of plaintiff and defendant counsel stated that judges are less likely to admit some types of expert testimony since Daubert.” (Margaret A. Berger, Upsetting the Balance Between Adverse Interests: The Impact of the Supreme Court’s Trilogy on Expert Testimony in Toxic Tort Litigation, 64 Law & Contemp. Probs. 289, 290 (2001).)

Similarly, a Rand Institute study of civil cases concluded that “since Daubert, judges have examined the reliability of expert evidence more closely and have found more evidence unreliable as a result.” (Lloyd Dixon & Brian Gill, Changes in the Standards of Admitting Expert Evidence in Federal Civil Cases Since the Daubert Decision, 8 Psychol. Pub. Pol’y & L. 251, 269 (2002).)

Moreover, some federal courts have demanded stringent epidemiological studies in toxic tort cases. (See Rider v. Sandoz Pharm. Corp., 295 F.3d 1194, 1202 (11th Cir. 2002) (“The district court, after finding that the plaintiffs’ evidence was unreliable, noted that certain types of other evidence may have been considered reliable, including peer-reviewed epidemiological literature, a predictable chemical mechanism, general acceptance in learned treatises, or a very large number of case reports.”).) Many cases do not even survive summary judgment, and some commentators have argued that the standards are too strict: “In some instances, judges have excluded medical testimony on cause-and-effect relationships unless it is based on published, peer-reviewed, epidemiologically sound studies, even though practitioners rely on other evidence of causality in making clinical decisions, when such studies are not available.” (Jerome P. Kassirer & Joe S. Cecil, Inconsistency in Evidentiary Standards for Medical Testimony: Disorder in the Courts, 288 J. Am. Med. Ass’n 1382, 1382 (2002).)

Post-Daubert Criminal Cases
In contrast, Daubert did not have the same effect in criminal litigation. In 2000, one commentator noted, “the heightened standards of dependability imposed on expertise proffered in civil cases has continued to expand, but . . . expertise prof-
ferred by the prosecution in criminal cases has been largely insulated from any change in pre-Daubert standards or approach.” (D. Michael Risinger, *Navigating Expert Reliability: Are Criminal Standards of Certainty Being Left on the Dock?*, 64 *A.B.A. L. Rev.* 99, 149 (2000).) In addition, an extensive study of reported criminal cases found that “the Daubert decision did not impact on the admission rates of expert testimony at either the trial or the appellate court levels.” (Jennifer Groscup et al., *The Effects of Daubert on the Admissibility of Expert Testimony in State and Federal Criminal Cases*, 8 *Psychol. Pub. Pol’y & L.* 339, 364 (2002).)

**NAS Report**

The NAS report recognized the disparity between civil and criminal cases. After noting that “trial judges rarely exclude or restrict expert testimony offered by prosecutors,” the report commented:

The situation appears to be very different in civil cases. Plaintiffs and defendants, equally, are more likely to have access to expert witnesses in civil cases, while prosecutors usually have an advantage over most defendants in offering expert testimony in criminal cases. And, ironically, the appellate courts appear to be more willing to second-guess trial court judgments on the admissibility of purported scientific evidence in civil cases than in criminal cases.

(*A Path Forward*, supra at 11.)

The report goes on to note:

“[T]here is no evident reason why [‘rigorous, systematic’] research would be infeasible.” However, some courts appear to be loath to insist on such research as a condition of admitting forensic science evidence in criminal cases, perhaps because to do so would likely “demand more by way of validation than the disciplines can presently offer.”


Other passages in the NAS report echo this theme:

- [T]here are serious issues regarding the capacity and quality of the current forensic science system; yet, the courts continue to rely on forensic evidence without fully understanding and addressing the limitations of different forensic science disciplines. This profound conjunction of law and science, especially in the context of law enforcement, underscores the need for improvement in the forensic science community. The report concludes that every effort must be made to limit the risk of having the reliability of certain forensic science methodologies judicially certified before the techniques have been properly studied and their accuracy verified.

(*A Path Forward*, supra at 85–86.)

- Review of reported judicial opinions reveals that, at least in criminal cases, forensic science evidence is not routinely scrutinized pursuant to the standard of reliability enunciated in *Daubert*. The Supreme Court in *Daubert* indicated that the subject of an expert’s testimony should be “scientific knowledge”—which implies that such knowledge is based on scientific methods—to ensure that “evidentiary reliability will be based upon scientific validity.” The standard is admittedly “flexible,” but that does not render it meaningless. Any reasonable reading of *Daubert* strongly suggests that, when faced with forensic evidence, “trial judge[s] must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable.” As the reported cases suggest, however, *Daubert* has done little to improve the use of forensic science evidence in criminal cases.

(*Id.* at 106.)

- [T]he courts often “affirm admissibility citing earlier decisions rather than facts established at a hearing.” Much forensic evidence—including, for example, bite marks and firearm and toolmark identifications—is introduced in criminal trials without any meaningful scientific validation, determination of error rates, or reliability testing to explain the limits of the discipline.

(*Id.* at 107–08.)

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Causes
The reasons for this state of affairs are not clear. Funding is no doubt part of the problem. Perhaps, judicial inertia also plays a part. One commentator provided another view:

For years in the forensic science community, the dominant argument against regulating experts was that every time a forensic scientist steps into a courtroom, his work is vigorously peer reviewed and scrutinized by opposing counsel. A forensic scientist might occasionally make an error in the crime laboratory, but the crucible of courtroom cross-examination would expose it at trial. This “crucible,” however, turned out to be utterly ineffective.

Unlike the extremely well-litigated civil challenges, the criminal defendant’s challenge is usually perfunctory. Even when the most vulnerable forensic sciences—hair microscopy, bite marks, and handwriting—are attacked, the courts routinely affirm admissibility citing earlier decisions rather than facts established at a hearing. Defense lawyers generally fail to build a challenge with appropriate witnesses and new data. Thus, even if inclined to mount a Daubert challenge, they lack the requisite knowledge and skills, as well as the funds, to succeed.


Georgia
Georgia’s approach is unique, if not bizarre. The evidence standard in civil cases differs from the standard in criminal cases. Georgia Code section 24-9-67 (2005) provides: “In criminal cases, the opinions of experts on any question of science, skill, trade, or like questions shall always be admissible; and such opinions may be given on the facts as proved by other witnesses.” In contrast, in civil cases, the statute provides in part:

It is the intent of the legislature that, in all civil cases, the courts of the State of Georgia not be viewed as open to expert evidence that would not be admissible in other states. Therefore, in interpreting and applying this Code section, the courts of this state may draw from the opinions of the United States Supreme Court in Daubert v. Merrell Dow Pharmaceuticals, Inc. (Ga. Code Ann. § 24-9-67.1(f.).)

In effect, a more demanding standard is imposed in civil cases than in criminal cases, a result the Georgia Supreme Court upheld in Mason v. Home Depot U.S.A., Inc., 658 S.E.2d 603 (Ga. 2008). A dissenting justice wrote:

Yet the Legislature imposes these qualifications only on potential expert witnesses in civil cases. The majority concludes this is perfectly acceptable because civil and criminal litigants are not similarly situated. I cannot agree. Reliable expert opinion testimony is no less important in criminal cases than it is in civil cases. Neither civil nor criminal parties stand to gain any benefit from the admission of expert opinion testimony that is the product of unreliable principles and methods applied unreliably to the facts of their cases. . . . There is no rational reason to subject evidence affecting an individual’s life and liberty to less rigorous standards of admissibility than that applied to evidence affecting mere property. The expert opinion evidence heard by a jury deciding a negligence claim against a podiatrist should not be more reliable than expert opinion evidence admitted to support imposition of a death sentence.

(Id. at 612–13.)

Conclusion
The disparity in evidentiary standard of admissibility is not new. The first Bush administration, by executive order, had imposed high standards for the admissibility of expert testimony in civil cases, while permitting federal prosecutors to argue for lower standards in DNA cases. (See Paul C. Giannelli, “Junk Science”: The Criminal Cases, 84 J. Crim. L. & Criminology 105 (1993).)