

Keeping Junk Science Out of the Courtroom

The American Association for the Advancement of Science has unveiled a remedy for the problem of junk science in the courtroom. It is launching a program to make independent experts available to federal judges who want to weed unreliable "evidence" out of their courtrooms.

Supreme Court Justice Stephen Breyer observed last year: "Society is becoming more dependent for its well-being on scientifically complex technology, so, to an increasing degree, this technology underlies legal issues of importance to all of us."

Rule of Law

By Doug Bandow

Questions of Norplant, Bendectin, silicone-breast implants, multiple-chemical sensitivity, and electromagnetic waves, among many others, often involve abstruse theories and evidence.

The Supreme Court has stated in no uncertain language that judges are responsible for the accuracy and reliability of the scientific evidence presented in their courtrooms. Six years ago, in *William Daubert v. Merrell Dow Pharmaceuticals*, it ruled: "The trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable." This, in turn, "entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid."

Earlier this year, the Supreme Court spoke out again on junk science when it applied *Daubert* to technical testimony in *Kumho Tire Co. v. Carmichael*, a case involving an allegedly defective car tire. Judges are "to make certain that an expert, whether basing testimony upon professional studies or personal experience,

employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field."

But carrying out such a gatekeeping role is no easy task. Judges are often little better-equipped than juries to deal with dueling experts in cases involving complex science and technology.

Some jurists have enlisted independent experts, an option available since 1975 under the Federal Rules of Evidence. For instance, Federal Judge Sam Pointer of Birmingham, Ala., tasked with overseeing thousands of cases involving silicone-breast implants, appointed a four-member panel of independent experts to help him sort through the science.

Other federal judges have used experts to assess cases ranging from genetic engineering to partial-birth abortion. Justice Breyer endorsed these efforts last year, but believed they were too haphazard—perhaps "because the process is unfamiliar, or because the use of this kind of technique inevitably raises questions." However, he observed, "Scientists have offered their help" in building "legal foundations that are sound in science as well as in law," and "we in the legal community should accept that offer."

The best offer comes from the American Association for the Advancement of Science. The AAAS has an international reach with 282 affiliated societies and 144,000 members. Membership stretches from basic and applied scientists to teachers and policy makers.

For several years, the National Conference of Lawyers and Scientists, a joint standing committee of the AAAS and the American Bar Association, has studied the problem of scientific evidence in the courtroom. In May, the AAAS inaugurated a five-year demonstration project, "Court Appointed Scientific Experts." The associ-

ation hopes to make available to judges independent scientists who would educate the court, testify at trial, assess the litigants' cases, and otherwise aid in the process of determining the truth.

Although "No specific mechanism is yet set in stone," according to Ellen Cooper of the AAAS, the group's project staff of three will work with a variety of outside experts to develop policies and procedures. An advisory committee, which includes judges, doctors, attorneys and scientists, will set the project's overall direction—including

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approving the process by which experts are selected.

Several subsidiary bodies, whose members will be chosen by AAAS staff and the advisory committee, will perform the detail work. Through one panel the association will work with other engineering and scientific organizations—its own affiliated groups have a combined membership of more than 10 million—to develop procedures for both identifying and recruiting experts. Then the AAAS will be able to respond to judges' requests with a list of potential experts in the relevant issue area.

Another committee will develop guidelines to screen experts for potential conflicts of interest. The AAAS says it is determined to insulate the process from partisanship. The Association's Deborah Runkle emphasizes that even its outside advisers won't know which judges have contacted the AAAS about which cases and won't be involved in "whether any case or any expert is selected."

The third body will oversee efforts to alert judges to the availability of the service. Ms. Runkle spoke at a workshop for federal judges in early June; she will be addressing similar events in August and September. Eventually the AAAS will distribute materials to federal judges to help them determine whether the project can be of assistance. Another priority will be to educate scientists in the intricacies of the legal process—that their notes are subject to discovery, for instance.

Panel number four will work with the Federal Judicial Center, a research branch of the federal judiciary, to monitor the project's results. If the program proves effective, it could then be made permanent.

The AAAS initiative has enormous promise. Indeed, there may be no better international clearinghouse for scientific expertise: The association reaches across disciplines and has contacts with virtually every scientific organization of note. Detailed participation from attorneys and judges should provide the practical expertise necessary for the group to put its expertise at the service of the federal judiciary. If successful, the project should be extended to state courts, the venue of most tort litigation and the most outrageous tort litigation.

Tort law should yield both efficiency and justice. Today's system, however, is a legal lottery, where lucky litigants win big payoffs irrespective of fault or harm. Reform requires legislative change—implementing the English Rule, under which losing litigants pay the winners' expenses, for example. But much can be done under existing rules. The AAAS program could turn out to be one of the most important practical steps yet taken to stem the tide of junk science in the courtroom.

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