A Daubert challenge is a hearing conducted before the judge where the validity and admissibility of expert testimony is challenged by opposing counsel. The expert is required to demonstrate that his/her methodology and reasoning are scientifically valid and can be applied to the facts of the case.

The term (see below) comes from the 1993 U.S. Supreme Court case, Daubert v. Merrell-Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), in which the Court articulated a new set of criteria for the admissibility of scientific expert testimony. In its 1999 Kumho Tire v. Carmichael opinion, the Court extended Daubert's general holding to include non-scientific expert testimony as well.

History of the Daubert Case

*Daubert* was a case involving birth defects allegedly caused by the mother's use of Bendectin, an anti-nausea drug, during her pregnancy. Merrill-Dow moved for summary judgment in the case, claiming its drug had not caused the injury to the child. In support of its motion, Merrill-Dow submitted the affidavit of a physician and epidemiologist, Dr. Steven H. Lamm, who was a respected authority in the area of health risks from exposure to chemical substances. In his affidavit, Dr. Lamm stated that he had reviewed 30 published studies involving more than 130,000 patients and that none of those studies had found Bendectin to cause injuries in fetuses. On that basis, he concluded that the use of Bendectin during the first trimester of pregnancy was not a risk factor for human birth defects. In response to Merrill-Dow's motion, *Daubert* presented affidavits from eight experts who, on the basis of various animal studies, claimed to have found a link between Bendectin and birth defects.

The trial court granted Merrill-Dow's motion, finding that Daubert's experts relied on evidence "not sufficiently established to have general acceptance in the field to which it belongs." The Court found that since there was a vast body of human epidemiological data in this area, animal cell studies were not sufficient to raise a reasonable jury issue regarding causation. The Court further found that the analysis by these experts, attacking the epidemiological analyses cited by Dr. Lamm based on "recalculations" of data in the previously published studies, were inadmissible as those findings had not been published or subjected to peer review so as to attain "general acceptance" in the field of epidemiology.

The Court of Appeals affirmed the trial court's decision based upon the *Frye* standard of general acceptance in the scientific community. That court found it to be of particular significance that there existed a massive amount of original published studies supporting the safety of Bendectin, all of which had undergone scrutiny by the scientific community, while the "reanalyses" by those suggesting the risks of Bendectin were neither published nor subjected to peer review. Those findings were considered novel scientific evidence or, as it has since become known, "junk science." Under the *Frye* standard, such "junk science" did not qualify as legally admissible expert testimony.

The case was appealed to the United States Supreme Court where the rulings of the lower courts were overturned and a new standard of admissibility was created. The Supreme Court, in addressing the facts of *Daubert* relating to scientific evidence and expert testimony, first established a two-step analysis to be used by the federal district courts in acting as the "gatekeepers" of the introduction of expert testimony. Those criteria are (1) that the evidence is relevant and (2) that it is reliable. In determining the issue of whether the evidence is to be considered reliable, the Court established a separate, non-exclusive four part test: (1) can the theory or technique be tested, (2)
has it been subjected to peer review and publication, (3) is there a known or potential rate of error, and (4) is there a level of general acceptance in that particular discipline's community, similar to the former Frye test. Thus, the single issue Frye test was expanded to include these new factors in evaluating the quality - and resulting admissibility - of scientific evidence and expert testimony.

The debate began immediately, with the dissenting opinion in the Daubert decision written by Chief Justice Rehnquist warning of the pitfalls inevitably created when the Supreme Court offers "general observations" in its opinions. He noted that in Daubert there were 22 amicus ("friend of the court") briefs filed by interested groups and individuals, many of which dealt with issues unrelated to the law, but rather to defining "scientific knowledge", "the scientific method", "scientific validity", and "peer review". Justice Rehnquist also noted that:

> Questions arise simply from reading this part of the Court's opinion, and countless more questions will surely arise when hundreds of district judges try to apply its teaching to particular offers of expert testimony. Does all of this dicta apply to an expert seeking to testify on the basis of "technical or other specialized knowledge" - the other types of expert knowledge to which Rule 702 applies - or are the "general observations" limited only to "scientific knowledge"? What is the difference between scientific knowledge and technical knowledge; does Rule 702 actually contemplate that the phrase "scientific, technical, or other specialized knowledge" be broken down into numerous subspecies of expertise, or did its authors simply pick general descriptive language covering the sort of expert testimony which courts have customarily received? . . .

509 U.S. at 600.

The state courts are divided on whether they will follow Daubert or continue to use the Frye standard. Of the various state courts that have decided to follow Daubert, all but two (Georgia and Connecticut) have standards on expert testimony similar to federal Rule 702. Yet even in those jurisdictions, a number have applied Daubert to certain scientific evidence cases only. Other states, including several with evidence rules analogous to Rule 702, have opted to still follow the Frye standard.