DAUBERT MOTION PRACTICE:
CHALLENGES TO QUALIFICATIONS,
RELIABILITY, METHODOLOGY, &
RELEVANCY OF EXPERT TESTIMONY IN
CIVIL RIGHTS LITIGATION

DRI Civil Rights & Governmental Liability Seminar

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by

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I. Introduction

Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), has been cited over 22,570 times in federal and state court decisions and secondary authorities. Decided in 1993, almost two decades after adoption of the Federal Rules of Evidence, Daubert held that the Frye "general acceptance" test for determining the admissibility of scientific evidence had not survived the enactment of the Rules, particularly Rules 702, 703, 402, and 403, and armed federal judges, district and appellate, with a more flexible means of controlling the growing glut of junk science and its seductive cousin, novel scientific evidence. It conferred upon Article III judges the responsibility of acting as evidentiary gatekeepers to enforce a new standard for admissibility of scientific evidence. These gatekeepers in turn were to screen proffered expertise through the sieve of a non-exclusive checklist of testing, error rate, peer review and publication, and general acceptance, making fact-intensive assessments to assure expert testimony was "not only relevant, but reliable." Id. at 589. Daubert also cautioned the evidentiary gatekeepers to focus "solely on principles and methodology, not on the conclusions they generate." Id. at 595.

The Daubert Trilogy

Daubert was followed by General Electric Co. v. Joiner, 522 U.S. 136 (1997), in which the Court addressed and attempted to resolve the methodology/conclusion dichotomy raised by Daubert. As the Court in Joiner stated, "conclusions and methodology are not entirely distinct from one another." 522 U.S. at 146. It emphasized that the trial judge as gatekeeper should consider whether there is "an analytical gap between the data and the opinion offered." Id. at 146. It implied, moreover, that in order for a trial judge to find that a proffered expert’s testimony is reliable, the judge must conclude that the expert followed proper methodology for the relevant science or field of specialized knowledge, and that the expert’s opinion was supported by the methodology used.

The Daubert trilogy was completed in 1999 when the Court decided Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999). Throughout this paper, unless indicated otherwise, references to Daubert shall mean the Daubert trilogy of Daubert/Joiner/Kumho, which extended Daubert and the newly conferred “gatekeeper” role for federal judges to all expert evidence under Rule 702. Kumho emphasized that, although the Daubert standard for experts is flexible, the district court judge should “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.” The Daubert standard now applies not only to scientific expert testimony but to all other expert testimony as well, particularly testimony based on “other specialized” knowledge as provided in Rule 702. See generally P. Oh, The Proper Test for Assessing the Admissibility of Non-Scientific Expert Evidence Under Federal Rule of Evidence 702, 48 Def. L.J. 221 (No. 2 1999).

Fact-Intensive Assessments

By 1999, the scope of Daubert having been clarified by Joiner and Kumho, the number of factors in the checklist expanded, and the Court made it clear that the gatekeeper function was to apply not just to scientific evidence, but to all expert evidence. The Daubert trilogy has spawned a cottage industry of sorts, and it is here to stay. For defense counsel, Daubert motion practice under amended Rules 702 and 703 can cut the heart out of a plaintiff’s civil action. Pursued without focus and with anything less than total preparation, however, it can educate an opponent and backfire. We will accordingly take a close look at the current state of Daubert challenges in federal civil rights litigation, effective techniques for exposing and excluding "high-volume
hacks" and hot-button issues of methodology, general acceptance and reliability. Counsel representing governmental clients can successfully confront, unmask and exclude a gaggle of opposing expert witnesses in fields of specialization that didn't even exist 20 years ago. The effectiveness of this evidentiary laser knife depends on preparation, timing, an understanding of the need for reliable expert testimony, and finding the best expert in the relevant field of specialized knowledge, training and expertise.

_Daubert_ and its progeny, _Joiner_ and _Kumho_, provide a means for trial judges to conduct fact-intensive assessments of scientific as well as non-scientific testimony. It helps to look at the historical development and broader context of the _Daubert_ trilogy. We will do just that before turning to specific applications of this evidentiary tool often implicated in every major stage of governmental litigation, from core disclosure to appeal, particularly civil suits against municipal and county defendants. Several unpublished opinions are included in this presentation not for precedential value, but to illustrate particularly helpful reasoning and analysis under the _Daubert_ trilogy.

**Governmental Litigation: Open Season**

Why focus on civil rights litigation in a discussion of the current state of _Daubert_ motion practice? Consider the nature of civil rights lawsuits and the basic personal rights that are asserted in the face of official policies, customs or practices under color of law. Consider the fact that civil rights litigation raises broad, dynamic issues of social justice, environmental justice, and economic justice. Into this vortex are pressures that come to bear on Article III judges faced with larger-than-life demands to resolve issues on the merits by admitting novel scientific and other expert evidence. Attorneys representing local governments must often form the front line of defense for governmental defendants so often the target of civil lawsuits. Those lawsuits often pivot on one element: they are supported by or defended through the medium of expert testimony. We will examine the broad parameters that determine when and how to use _Daubert_ motions in governmental litigation in federal court, then center on the techniques, timing and strategic choices employed in effective _Daubert_ challenges. Finally, we will offer constructive suggestions for assisting Article III “gatekeepers” in the exercise of their discretion to exclude flimsy expert testimony and admit reliable, relevant expert testimony that will aid the trier of fact.

_Monell_-fueled surge in §1983 litigation: “Hungry as Locusts”

For attorneys who have toiled in the trenches of local government litigation for two years or thirty-two years, it is clear that cities, counties and other governmental entities are targets for civil rights suits and have been for quite some time. Most local government counsel in the early 1970's, before _Monell v. Department of Social Services_, 436 U.S. 658 (1978), could usually count on one hand the number of civil rights actions filed against their governmental clients. Just a few years after 42 U.S.C.§1983 was revitalized by _Monell_, Chief Justice Warren E. Burger was quoted in Time magazine's Aug. 20, 1979 issue as saying: "We may well be on our way to a society overrun by hordes of lawyers, hungry as locusts, and brigades of judges in numbers never before contemplated." That number exploded with the post-_Monell_ geometrical increase in federal legislation designed to protect, extend and strengthen individual rights. Litigation targeting cities, counties and other political subdivisions, boards and agencies acting under color of state law grew in frequency and ferocity throughout the decades of the 1980's and 1990's. Some of the nations' leading scholars and jurists joined ranks with advocates of tort reform in an effort to bring some sanity back into what some decried as a runaway legal system. That system was brimming with experts in such fields of expertise as grief, hedonic damages, multivariate regression analysis, and disciplines that were unheard of just a few decades before. Enter _Daubert_. The defense bar learned quickly that a properly supported _Daubert_
motion could be the silver bullet for neutralizing experts who fabricated or inflated their qualifications. It became the weapon of choice to exclude experts who made their living based on academic fraud. And it resulted in increased judicial scrutiny of experts who testified outside their field of expertise. The poster child for this defense counterattack is described in C. Cwik & J. North, Scientific Evidence Review: Admissibility and Use of Expert Evidence in the Courtroom, Monograph No. 6, at 8-9 (ABA Section of Science and Technology Law 2003). The authors recounted the guilty plea and perjury conviction of the toxicology expert in Florida whose prosecution for fraudulent credentials included evidence that he handed out a copy of his master’s degree dated 1971 and signed by “Lawton Chiles, Governor,” although Chiles was a U.S. Senator in 1971 and did not serve as governor until 1991. See generally S. Easton, Ammunition for the Shoot-Out with the Hired Gun’s Hired Gun: A Proposal for Full Expert Witness Disclosure, 50 Def. L.J. 421 (No. 3 2001).

Federal Civil Rights Litigation Post-Daubert

Let’s remember the context in which much of this expert voodoo has come about. A decade ago one in every eight federal cases citing Daubert was a civil rights action. That ratio has not diminished as our society blitzes into the 21st Century. Our technological capacity has taken another quantum leap over the past decade. Like it or not, we place greater and greater reliance on technology to regulate, order, moderate and direct human behavior in employment, civil rights, partisan politics, reproductive rights, law enforcement, medical marijuana use, and even the right to die. This high-tech Gates/Jobs/Dell-inspired phenomenon has helped fuel the explosion of new federal causes of action under the ADA, ADEA, Title VII, and other legislative and judicial expansions of civil claims. Contributing to the exponential growth of experts and the seemingly unabated need for expert testimony was an amendment to the Civil Rights Act. This landmark legislation – The Civil Rights Restoration Act of 1991 - bore a name few in the House or Senate could openly attack when it sailed through Congress in 1991. In its wake, the economic value of employment-related claims skyrocketed. Plaintiffs’ counsel found a greater financial incentive to invest the significant amounts of money required to hire seasoned, sophisticated and thoroughly polished experts to prosecute EPL claims and other species of employment law litigation. Financial incentives also added fuel to the fire as prevailing parties in certain types of civil rights cases were found entitled in appropriate cases to recover expert fees and costs. See generally L. Finley, Guarding the Gate to the Courthouse: How Trial Judges are Using Their Evidentiary Screening Role to Remake Tort Causation Rules, 50 Def. L.J. 49 (No. 1 2001).

With this short summary of “how we got to here from there” as a backdrop, let’s turn now to the mechanics of a Daubert challenge.

II. The Daubert Factors: A Nonexclusive List

Daubert identified a non-exhaustive list of factors for consideration when determining the reliability of proffered testimony. Johnson Elec. North Am., Inc. v. Mabuchi Motor Am. Corp., 103 F. Supp. 2d 268, 282 (S.D.N.Y. 2000) ("the four Daubert factors do not constitute a definitive checklist or test but must be tailored to the facts of the particular case") (internal quotation marks and citations omitted). In many cases, "the relevant reliability concerns may focus upon personal knowledge or experience." Rivera v. Mill Hollow Corp., 2000 U.S. Dist. LEXIS 11886, *2, 2000 WL 1175001 (S.D.N.Y. 2000) (quoting Kumho Tire Co., 526 U.S. at 150)). Put in the form of specific inquiries, these include the following as to the theory or technique under scrutiny:
1. Is the expert’s technique or theory one that can be or has been tested or challenged in an objective sense, or is it instead simply a subjective, conclusory approach that cannot reasonably be tested for reliability?

2. Has the technique or theory been subject to peer review and publication?

3. What is the known or potential rate of error of the technique or theory when applied?

4. Do standards and controls exist and are they maintained?


**Expert Evidence and Federal Case Management**

As Daubert motions proliferated and Rule 104(a) hearings became more commonplace over this past decade, management of expert evidence has morphed into an integral part of federal case management, with federal district court judges acting as gatekeepers who must pass on expert opinion testimony’s reliability and relevance. D. Herr, Annotated Manual for Complex Litigation 23.21 at 536 (Thomson West 2005). The Supreme Court has repeatedly emphasized, moreover, that the Daubert factors were not intended to be a restrictive, exclusive listing, but a flexible multifactor yardstick to be applied in an intensely fact-specific inquiry. To that end, the lower courts have added a number of other factors to the list, which are set forth again in the form of specific inquiries:

6. Is the expert testimony based on research the expert has conducted independent of the litigation? See Ambrosini v. Labarrique, 101 F. 3d 129, 139 (D.C. Cir. 1996), cert. dismissed, 516 U.S. 869 (1995)(factor favoring admissibility of plaintiff’s expert witness opinion testimony was that the witness has previously testified about his opinion on causation in a public hearing not connected with the subject litigation); In re TMI Litigation, 193 F. 3d 613, 665 (3d Cir. 1999).

7. Has the expert adequately accounted for obvious alternative explanations? See Michaels v. Avitech, Inc., 202 F. 3d 746, 753 (5th Cir. 2000), cert. denied, 531 U.S. 926 (2000); Westberry v. Gislaved Gummi AB, 178 F. 3d 257, 265 (4th Cir. 1999) (unless expert is unable to explain why he concluded proffered alternative was not sole cause, evidence of alternative causes goes to the weight and not admissibility).

8. Has the expert employed the same care in reaching her litigation-related opinions as the expert employs in performing her regular professional work? See Sheehan v. Daily Racing Form, Inc., 104 F.3d 940 (7th Cir. 1997). See Munafo v. Metropolitan Transportation Authority, 2003 U.S. Dist. LEXIS 13495, at *56 (E.D.N.Y. 2003) (“While an expert need not rule out every potential cause in order to satisfy Daubert, the expert’s testimony must at least address obvious alternative causes and provide a reasonable explanation for dismissing specific alternate factors identified by the defendant.”) In other words, has the expert been as careful as he would be in regular professional work outside of paid litigation consulting?


11. Has the expert engaged in improper extrapolation, i.e., drawn an unsupported conclusion from an accepted premise? See D. Herr, Annotated Manual for Complex Litigation 23.32 at 551 (Thomson West 2005), citing Black v. Food Lion, Inc., 171 F. 3d 313-14 (5th Cir. 1999) (expert opinion based on post hoc ergo propter hoc reasoning held unsupported by specific reliable methodology and contradicted by general level of medical knowledge); Moore v. Ashland Chem., Inc., 151 F. 3d 269, 279 (5th Cir. 1998) (exclusion of testimony of expert who drew unsupported conclusions).

12. To what nonlitigation uses has the method been put? See D. Herr, Annotated Manual for Complex Litigation 23.32 at 552 (Thomson West 2005).

Daubert Examination Checklist: A Skinny for the Last Minute Review

Preparation for a Daubert examination requires a solid grasp of the principles, methodology, techniques, and limitations of expert testimony. To prepare your own expert to be ready for a thorough cross-examination, counsel must do more than review the opinions and conclusions, and the basis for those opinions and conclusions. Time expended in preparing a party's own expert will help arm the expert with the knowledge and understanding of what to expect from opposing counsel. In doing what must be done to make one's expert "Daubert-proof", this means not only reviewing the expert's report, but putting him or her through the rigors of cross-examination. Mock cross-examination tends to be put off by many attorneys until the day or week before an expert's deposition, but it is an essential component of preparation that will allay concerns or unspoken fears the expert may have about potential impeachment, contradiction and a withering, blistering, exhausting cross-examination.

Preparation to run this gauntlet with your expert should begin with a hands-on discussion of the Daubert factors:

1. TESTABILITY: Have the principles, theories and techniques employed by the expert been tested?

2. PEER REVIEW AND PUBLICATION: Have those principles, theories and techniques been subjected to peer review and publication?

3. ERROR RATE: Do the techniques employed by the expert have a known error rate?

4. STANDARDS: Are the techniques subject to standards that govern their application?

5. GENERAL ACCEPTANCE: Do the principles, theories and techniques employed by the expert enjoy widespread, general acceptance?
Preparing for a *Daubert* Challenge: Practical Suggestions

This is just the beginning of your preparation. While no checklist can cover every aspect of expert opinion testimony, the following suggestions will provide a helpful starting point, supplemented by additional inquiries and factors tailored to the particular facts, field of expertise, issues and subject matter of the particular case. As noted earlier, this is not a bean-counting exercise, but should be approached as an effort to persuade the trial judge to rule favorably when a *Daubert*-based objection to admissibility is raised. Conversely, to the extent that the opposing expert cannot be satisfactorily responsive to these suggested areas of inquiry, his or her expert testimony will have a correspondingly lesser likelihood of being admitted:

1. Is the expert qualified in the specific field of expertise involved? Confirm a "fit" between the expert's opinion and the field involved.
2. Is there generally accepted body of learning, study and experience in that field?
3. Is the expert’s testimony grounded in that body of learning, study and experience?
4. Can the expert explain how his conclusion is so grounded?
5. Explain the principles of the specific field.
6. Explain the expert’s methodology and steps involved in that methodology to be taken to solve the particular issue or problem.
7. Has the principle, theory or technique been objectively tested, or can it be?
8. Has the principle, theory or technique been subjected to peer review or publication?
9. Does the principle, theory, technique or method have a low potential rate of error?
10. Has the principle, theory, technique or method been generally accepted by the relevant industry as proper to be used in matters of this sort?
11. Has the principle, theory, technique or method been used outside the litigation in which the expert's opinion or conclusion is being offered?
12. For the expert's field of expertise, can he show that an appropriate specific method, theory or technique was used, tested and subjected to peer and publication; identify the known or potential rate of error with respect to the technique; and show that standards controlling the technique's operations are reasonable?
13. If the expert is relying solely or primarily on experience, can he explain and show how that experience leads to the conclusion reached, why that experience is a sufficient basis for the opinion, and how that experience is reliably applied to the facts?
14. Have all the data, items, materials involved in the case have been inspected or reviewed?
15. If an on-site investigation or experience is appropriate, has the expert interviewed appropriate persons and inspected the appropriate site?
16. Has the expert read the appropriate learned treatises, articles or materials in the field of his expertise?

17. Can the expert identify the studies in the field relied upon, including published studies, and are those studies reliable?

18. Can the expert explain why the methodology, rates of error, and results of these studies are reasonably relied on by experts in his field?

19. If the expert is relying on experience as the basis for his opinion, can he explain what his experience consists of and how that experience leads to the opinion and conclusion he reached?

20. Can the expert show and explain that the rate of error in his method, technique or conclusion is low?

21. Can the expert show how he applied his knowledge and experience in evaluating and handling the data, articles, and technical literature and making his analysis?

22. If causation is the subject of the expert's testimony, has he ruled out other plausible alternative causes of the event, injury or condition in question?

23. Is there a logical connection and no analytical gap between the data and the expert's opinion or conclusion, and can the expert explain how that data has been bridged to the opinion or conclusion by sound inductive or deductive reasoning?

24. Was the expert's opinion or conclusion reached outside the arena of litigation?

III. The Expanded Role of the Judiciary under Daubert

As one might surmise from this checklist approach to Daubert, the legal paradigm for evaluating expert testimony has undergone a dramatic shift since 1993. *Daubert* significantly broadened the discretion of trial judges to exclude what could often be exposed as litigation-driven speculation driven by the *ipse dixit* of forensic charlatans. It did these things by turning judges into "gatekeepers," armed with an analytical framework closely aligned to the wording, intent and purpose of the Federal Rules adopted less than two decades before. See generally D. Richmond, *Regulating Expert Testimony*, 47 Def. L.J. 203 (No. 2 1998).

Alternative to Frye

*Daubert* has given the bench, bar and litigants a far more relaxed alternative to *Frye v. United States*, 293 F. 2d 1013 (D.C. Cir. 1923), a hoary precedent that was considered the traditional test for weighing expert testimony and determining the reliability of expert evidence, until *Daubert* brought about a sea change in federal civil litigation.

On the one hand, *Frye* established a test for the admissibility of scientific evidence based on an inquiry into whether it had gained general acceptance in the particular field to which it belonged. It came to be seen as an overly restrictive approach to expert evidentiary issues. On the other hand, *Daubert* emphasized the "liberal thrust of the Federal Rules and their general approach of relaxing the traditional barriers to opinion testimony." 509 U.S. at 588, 113 S.Ct. at 2794 (internal quotation marks and citation omitted); see also *Joiner*, 522 U.S. at 142, ("[T]he Federal Rules of Evidence allow district courts to admit a somewhat broader range of scientific testimony than would have been admissible under *Frye ....*."). It has come to be seen by some as
inviting a defense challenge to virtually any expert witness a plaintiff seeks to use, and by others as placing trial judges in the position of evaluating the admissibility of expert evidence with standards appropriately defined and narrowly tailored to separate valid scientific, technical and specialized methods and techniques from those lacking in empirical support, sound methodology, and generally accepted principles. Daubert expressly rejected as too rigid the Frye "general acceptance" test for evaluating the admissibility of scientific testimony given by experts under Rule 702. Kitt v. City of New York, infra at 356 ("Daubert requires more ... than a sterling resume to permit opinion testimony by a professed expert The Supreme Court, manifestly concerned with the impact on jurors of `junk science' testimony, in which `experts' provide a basis for liability by offering unorthodox opinions outside the range of generally accepted scientific theory, rightly insisted that judges serve a `gatekeeper' function. ... See also Advisory Committee Note to Rule 702 (2000 Amendment) ("The trial court's gatekeeping function requires more than simply taking the expert's word for it")"). It also suggested a dichotomy between an expert's methodology and her conclusion. In short, trial judges as gatekeepers were encouraged to scrutinize expert testimony by analyzing the methodology employed by the expert, but were to refrain from questioning the accuracy or correctness of the conclusions reached by the expert. The devil was in the details when it came to this dichotomy between methodology and conclusions.

"Red Flags" for Expert Testimony

Courts have struggled to this day with the appropriate degree of inquiry into the conclusions reached by a non-scientific expert, however, and some have examined not only the appropriateness and reliability of the methodology used by experts, but have gone further to ask whether the expert's conclusions are supported by the methodology used. Their inquiry goes beyond the Daubert factors and is facilitated by a comprehensive, fact-specific assessment of what have been dubbed "red flags" suggesting unreliability. These red flags have been developed by the lower courts applying Daubert and are just as applicable to other types of expert testimony as they are to scientific evidence. While these additional factors and considerations are not dispositive of admissibility, alone or in combination, they all generally lean against admission when present. One of the best summaries of these "red flags" appears in the eighth edition of Stephen Salzburg's Federal Rules of Evidence Manual, originally published in 1975, and now a vital five-volume treatise that few federal civil litigators can do without. 3 S. Saltzburg, M. Martin & D. Capra, Federal Rules of Evidence Manual §702.02[7] (8th ed., Mathew Bender & Co. 2002). The red flags correspond to the Daubert examination checklist that appears at the end of this presentation, and consists of the following:

1. improper extrapolation
2. reliance on anecdotal evidence
3. reliance on temporal proximity
4. insufficient connection between the expert's opinion and the facts of the case
5. ruling out other possible causes
6. insufficient foundation for the expert's opinion
7. subjectivity.
Indisputable Correctness Not Required

The party seeking to admit expert evidence over a *Daubert* challenge is not required to prove that the expert is undisputably correct, but must be prepared to show that the methodology used by the expert in reaching each conclusion is scientifically or technically sound and based on facts which sufficiently satisfy the reliability requirements of Rule 702. See, e.g., *Mehus v. Emporia State Univ.*, 222 F.R.D. 455 (D. Kan. 2004). In this regard, the Advisory Committee Notes to the 2000 Amendment to Rule 702 recognize that when the facts are hotly contested, experts can and do reach different conclusions based on competing versions of facts. The amended version of Rule 702, with its emphasis on “sufficient facts or data,” is “not intended to authorize a trial court to exclude an expert’s testimony on the ground that the court believes one version of the facts and not the other.” Advisory Committee Notes to 2000 Amendment to Rule 701, Fed. Civ. Jud. Proc. & Rules 431 (2005 ed.). Although involving the admissibility of expert testimony in product liability litigation as opposed to §1983 litigation, *In re Ephedra Products Liability Litigation*, 2005 WL 2260204 (S.D.N.Y. September 18, 2005), contains an excellent discussion by District Judge Jed Rakoff of what constitutes “good science,” and the level of extrapolation that may affect admissibility of expert testimony.

Scientists, too, form professional opinions that are reasonably based on “good science” but where the data is insufficient for definitive scientific proof. To hold the opinions of scientists inadmissible unless backed by statistically significant results from tightly controlled (and very expensive) experiments would set a separate, higher standard for scientists than other witnesses with specialized knowledge. Such a difference is without support in the language of Rule 702 itself, which makes no relevant distinction between scientific knowledge and technical or other specialized knowledge. Moreover, there is no convincing need to make such distinctions. Experts of all kinds tie observations to conclusions through the use of what Judge Learnedhand called “general truths derived from ...specialized experience.” *Id.* at *4-5. ... To be sure, some opinions of scientists must be excluded in the exercise of the district court’s gatekeeping role. The objective is 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. ... To be admissible, the opinion must be reasonably based on good science. The analogies, inferences and extrapolations connecting the science to the witness’s conclusions must be of a kind that a reasonable scientist or physician would make in a decision of importance arising in the exercise of his profession outside the context of litigation. If the court finds the gap too great between the science and the witness’s conclusion, the opinion is inadmissible. *Id.* at *5 (internal quotation marks and citations omitted). ... *Daubert* was designed to exclude “junk science.” It was never intended to keep from the jury the kind of evidence scientists regularly rely on in forming opinions of causality simply because such evidence is not definitive. The legal standard, after all, is preponderance of the evidence, i.e., more-probable-than-not, and that applies to causality as to any other element of a tort cause of action. Rule 702, a rule of threshold admissibility, should not be transformed into a rule for imposing a more exacting standard of causality than more-probable-than-not simply because scientific issues are involved. It is one thing to prohibit an expert witness from testifying that causality has been established “to a reasonable degree of scientific certainty” when the very exacting standards for determining scientific certainty have not been met. But it by no means follows that a scientific expert may not testify to the scientific plausibility of a
particular hypothesis of causality or even to the fact that a confluence of suggestive, though non-definitive, scientific studies make it more-probable-than-not that a particular substance (such as Ephedra) contributed to a particular result (such as a seizure) Id. at *6.

Helpfulness to the Trier of Fact

Disputes over the admissibility of expert testimony are routine and can arise at virtually any stage of litigation. An expert must not only be qualified, but the subject matter of his or her proposed testimony must consist of specialized or technical knowledge that will be helpful to the trier of fact in deciding the case correctly. While exclusion of an expert on the ground that he or she is unqualified is rare, it happens on occasion. See, e.g., *Eagleston v. Guido*, 41 F. 3d 865 (2d Cir. 1994)(excluding sociologist’s testimony that police department failed to provide sufficient training in domestic violence cases, where plaintiffs failed to establish the witness’ expertise in either criminology or domestic violence, court noting that the witness’ sociology doctorate was “a credential that does not in itself describe any specific body of scientific or technical expertise pertinent to this case.”); *United States v. Williams*, 212 F. 3d 1305 (D.C. Cir. 2000)(police officer with experience limited to less than a dozen firearm-related arrests did not have sufficient grounding to be qualified as an expert to opine that it was common for drug users to carry a gun for protection); *Wilson v. Woods*, 163 F. 3d 935 (5th Cir. 1999)(excluding college teacher proffered as an automobile accident reconstruction expert, since he could not show that his training as an engineer qualified him to testify to the principles of accident reconstruction, where he had never taught a course concerning accident reconstruction, had no certificate or degree in that field, never conducted studies or experiments in that field, and never took any measurements or collected any data in the case); *Seatrax, Inc. v. Sonbeck Int'l, Inc.*, 200 F. 3d 358 (5th Cir. 2000) (excluding expert testimony about defendant’s profits from infringing activity in action for infringement and misappropriation of trade secrets regarding offshore marine crashes, despite witness’s experience in marine crane industry, since he had no experience or training as an accountant and had done no independent examination into defendant’s sales data).

Self-Proclaimed Experts

In *Thomas J. Kline, Inc. v. Lorillard, Inc.*, 878 F. 2d 791 (4th Cir. 1989), the court excluded a self-proclaimed expert who was to testify that certain credit practices constituted price discrimination, reasoning that “it would be absurd to conclude that one can become an expert simply by accumulating experience in testifying.” The witness in this case was not an economist, had no experience making credit decisions, had done no research or writing on the subject matter and sought to be qualified based on her employment by a company that provided experts-for-hire in sophisticated financial litigation). Rule 702’s requirement that the witness be qualified by “knowledge, skill, training, education or experience” to testify as an expert has been interpreted liberally by the courts. In many fields of expertise a witness need not be an outstanding expert, the leading authority, or well-known and respected in the field. There are just as many fields of expertise in which a witness may be qualified as an expert sans formal education, special training, an encyclopedic knowledge, authorship of peer-reviewed publications or scholarly research. Cf. *Nims v. Ashcroft*, 354 F. 3d 652 (7th Cir. 2004) (In ruling on an agency decision to deny political asylum to plaintiff, the Court held that an instructor and expert in Bulgarian politics was properly allowed to testify, despite lack of publications in the field, noting that “there is no ironclad requirement that an academic, to be qualified as an expert witness, must publish academic books or articles on the precise subject matter of her testimony”).
Methodological Unreliability

Despite this liberal interpretation, a witness considered “qualified as an expert” nonetheless can be excluded if he offers unreliable testimony, as shown by “methodological unreliability or lack of intellectual rigor.” Quiet Technology DC-8 v. Hurel-Dubois UK Ltd., 326 F. 3d 1333 (11th Cir. 2003)(“our caselaw plainly establishes that one may be considered an expert but still offer unreliable testimony”). Moreover, an expert’s testimony should be kept within the witness’ designated area of expertise. Merely designating a witness as an “expert” does not constitute a “license to unconstrained testimony on all scientific, technical, and other specialized matters.” 3 S. Saltzburg, M. Martin & D. Capra, Federal Rules of Evidence Manual §702.02[3], at 702-13 n18 (2002).

In United States v. Tucker, 345 F.3d 320 (5th Cir. 2003), defendant, a corporate official had drafted a private placement memorandum (PPM) to entice potential investors to purchase trust certificates. The official was charged with securities fraud and at trial proffered expert testimony from an attorney and securities expert on the meaning of terms used in communications with investors. The testimony included expert testimony pertaining to the nature of the certificates as "securities" and the definition of the term "invest." The trial judge excluded this testimony, following which the jury found that the official sent fraudulent PPMs to potential investors via the mail and that he directed investors to make payments via the mail. The trial judge did not question the expert's qualifications but ruled that various points from expert's testimony would not be helpful to the jury. Although the Fifth Circuit found that the trial judge erred under Rule 702 in not allowing defendant's expert witness to endorse an expanded interpretation of the term "invest" to refute the government's more restrictive meaning, it considered this error harmless since the expert's explanation would have accounted for only a small portion of defendant's widespread misuse of the proceeds. The Court held that the trial judge properly excluded the expert's testimony pertaining to the nature of the certificates as "securities" and to defendant's belief about the nature of the certificate.

IV. Precursors to Rule 26 Written Reports

The Brandeis Brief had its genesis in the 1908 case of Muller v. Oregon, in which future U.S. Supreme Court Justice Louis Brandeis as additional counsel for the State of Oregon collected empirical data drawn from hundreds of statistical, sociological, economic, and physiological sources in a brief that provided the Court with social authorities on the issue of the impact of long working hours on women. Muller v. Oregon, 208 U.S. 412 (1908) upheld Oregon state restrictions on the working hours of women as justified by the special state interest in protecting women's health. Additional counsel for the State of Oregon was Louis Brandeis, a future Supreme Court Justice, who prepared and filed a voluminous brief in support of the Oregon law that collected empirical data from hundreds of sources. This first Brandeis Brief actually consisted of several pages setting forth the test of the state law’s constitutionality, but the remainder of the brief, resembling a report of 111 pages in length, consisted of empirical data supporting the state legislature’s conclusion that the state law was constitutional as reasonable regulation. The mountain of factual evidence Brandeis collected from 20 states and several European nations included legislative findings and empirical data from industrial commissions, factory inspectors, doctors, public health officials, sociologists, and experts in housing and hygiene. Addressing the evil consequences of long hours, Brandeis cited a Report from the Massachusetts Board of Public Health (1873); The International Conference in Relation to Labor Legislation, Berlin, 1890; Proceedings of the French Senate, July 9, 1891, "Argument for a Ten Hour Day for Women"; a Report of the New York Bureau of Labor Statistics, 1900; and a Report of the United States Industrial Commission, 1901. These were just a few of the 23 studies cited in a nine
page section of his 111 page report, a more complete discussion of which can be found in Legal Advocacy before the Supreme Court: Thurgood Marshall, John W. Davis, Sociological Jurisprudence, and School Segregation, http://www.andover.edu/library/oldsitefiles/lyons/chapter01.html.

The Brandeis Brief

By emphasizing economic and social evidence rather than legal precedents, the Brandeis Brief was the first instance in the history of American Jurisprudence that social science and empirical data in report format was used in law and changed the direction of the U.S. Supreme Court, and became the model for future Supreme Court presentations and the prototype for later reform litigation. The Brandeis Brief became a paradigm of "sociological jurisprudence."

*Brown v. Board of Education*

It gained particular attention in 1954 when federal civil rights litigation came of age in *Brown v. Board of Education*, 347 U.S. 483 (1954). The school desegregation cases, beginning with *Brown* and extending throughout the 1960’s, set the stage for what was in a sense the forerunner to the Rule 26 written report of an expert. Professor Kenneth Clark's tests that used dolls representing different races in *Brown* were a forerunner of the type of evidence that has gained currency in today’s litigation environment. *Brown*, 347 U.S. at 495 n.11, citing K. B. Clark, *Effect of Prejudice and Discrimination on Personality Development* (Midcentury White House Conference on Children and Youth, 1950). Such "expert evidence" reflected something more than a mass of statistical data. It set forth a novel but convincing methodology for evaluating and determining the weight and persuasiveness of novel scientific evidence, technical data requiring specialized knowledge. In a compelling footnote in *Brown v. Board of Education*, the Supreme Court discussed psychological studies involving Black and White dolls. *Roe v. Wade* gave the Supreme Court yet another opportunity to delve into an area of medical science dealing with question of when life begins, a decision which even today touches a national nerve whenever and in whatever context it arises. *Lefleur, Von Raab* and other landmark cases provided the nine Justices with a vehicle to adjudicate when and under what circumstances a pregnant school teacher may continue to work, or whether a methadone user can be employed as a public transit worker, or whether penological evidence can support a state agency’s decision not to hire correctional officers simply because of their gender.

2000 Amendments to Rule 26, F.R.C.P.

So where does the Brandeis Brief find relevance in today’s federal litigation environment? We have already noted that, as *Daubert* gained more and more prominence in federal civil and criminal litigation, the use of experts has increased exponentially. This increase has been sharpened by the 2000 amendments to the Federal Rules of Civil Procedure. Specifically, one can plausibly view the 2000 amendment to Rule 26 requiring written reports of experts as an extension of the type of specialized submission used by Justice Brandeis almost a century ago and in *Brown v. Board of Education* half a century ago to provide the trial court with a methodology for evaluating complex, technical, and specialized evidence.

Under Rule 26(a)(2)(B)(2003), a testifying expert must submit a signed written report prior to trial, containing [1]"a complete statement of all opinions to be expressed and the basis and reasons therefore," [2] "the data or other information considered by the witness in forming the opinions," [3] "any exhibits to be used as support for or a summary of the opinions," [4] "the qualifications of the expert and all publications authored by the expert in the
past ten years,” [5] “the expert’s compensation for his review and testimony,” and [6] “a list of all other cases in which the expert has testified at trial or at deposition in the past four years.” In the same vein, the core disclosure and expert designation requirements and concomitant expanded use of expert depositions, coupled with judicious use of Rule 104(a) hearings, have made Daubert challenges an integral part of every federal litigator’s arsenal. Daubert-related concerns can reverberate through virtually every stage of civil litigation, from the initial Rule 16 scheduling conference, the Rule 26(a)(2)(B) expert written report and Rule 56 Motions for Summary Judgment to trial, post-trial motions and appeal. “The judge’s performance of the gatekeeper function will be intertwined with his or her implementation of F.R.C.P. 16.” D. Herr, Annotated Manual for Complex Litigation 536, n. 1554 (4th ed. 2005)(citing Joiner, 522 U.S. at 149 (Breyer, J., conc.)).

V. Nuts and Bolts of Daubert Challenge

Courts routinely employ a variety of methods and procedures to determine the reliability and admissibility of proffered expert testimony, ranging from pretrial hearings on a motion in limine, rulings based on the record without live testimony or a hearing, trial hearings outside the presence of the jury, and rulings on post-trial motions. S. Goode & O. Wellborn, Courtroom Handbook on Federal Evidence 368 (Thomson West 2005). A typical vehicle for presenting a Daubert challenge is a Rule 56 Motion for Summary Judgment coupled with a Motion in Limine and Request for a Rule 104(a) Hearing, particularly where exclusion of expert evidence may remove an essential element of the opposing party’s prima facie case. Of course, there are other avenues available at different phases of federal civil litigation in which a challenge to the admissibility of expert opinion testimony may be made, but motions in limine under 104(a) have gained tremendous importance during the past decade in implementing the trial judge’s gatekeeping role under the Daubert trilogy.

Advisability of Hearing

While the trial judge may not be obligated to hold a hearing on the motion, a hearing is most advisable, and in some jurisdictions approaches mandatory, when a ruling on expert evidence is likely to have a substantial impact on the merits of the claims or defenses. When a hearing is held, the trial judge will likely exert a greater than normal degree of oversight, supervision and control, defining the limitations and restrictions applicable to the hearing, carefully monitoring and controlling the progress of the hearing, the extent to which witnesses may be called to testify, and associated briefing and argument of counsel. If held, a hearing on such a motion in limine be scheduled well in advance of trial, so that its disposition will provide a maximum degree of assistance to the parties in trial preparation and, perhaps, a maximum incentive to explore settlement. Reference Manual on Scientific Evidence 53-54 (2d ed. Fed. Jud. Ctr. 2000)

Thorough Preparation

A Daubert challenge of the expert testimony proffered by an opponent's expert is no casual exercise. It should be undertaken after thorough study of the report, written materials, publications, studies and available literature within the field of expertise of the expert. The focus of all preparation for a Daubert challenge should be to reveal fatal deficiencies in the opinions and the basis for each opinion of the opposing expert with respect to each of the Daubert factors. This means an intense and systematic scrutiny of the evidence that will otherwise come in through that expert, and a principled, sustained attack on those aspects of that evidence so that the trial judge can make a rational and supportable determination whether the expert, technical or scientific evidence in question is reliable and admissible.
Weak expert testimony can and should be attacked through vigorous cross-examination, and a party challenging expert testimony may impugn the expert’s knowledge and skill in a way that would make his mother smile. But the cross-examiner runs the distinct risk of having the trial judge declare that such an attack goes to the weight and credibility, not the admissibility, of the expert testimony. Any shortcoming of the expert’s actual testimony when attacked in this manner is deemed grist for cross-examination, but it will usually not be a ground for exclusion under Rule 702. See, e.g., McCullock v H.B. Fuller Co., 61 F.3d 1038, 1043 (2d Cir. 1995) (“[defendant’s] quibble with [expert’s] academic training . . . and his other alleged shortcomings . . . were properly explored on cross-examination and went to his testimony's weight and credibility - not its admissibility”) (internal citation omitted); B.F. Goodrich v. Betkoski, 99 F.3d 505, 525--26 (2d Cir. 1996) (“if the appellees honestly believe this scientific evidence is weak, they should cross--examine [the expert witness] vigorously at trial and present contrary evidence to refute his findings and conclusions”).

Consideration of the Rules in Context

Daubert challenges cannot be asserted in a vacuum, nor should the trial judge or counsel pursuing such a motion do so myopically. When a district court undertakes a Daubert analysis, it “should also be mindful of the other applicable rules” such as Rule 703, which provides in part:

The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence in order for the opinion or inference to be admitted. . . .

Rule 703 is not satisfied when an expert predicates his own opinion upon unfounded data or analysis. The fact that the expert “relied upon the report [of another] did not relieve the Plaintiffs from their burden of proving the underlying assumptions contained in the report.”

Importance and Consequences of Rule 26 Expert Disclosures

Expert disclosures contemplated by Rule 26 are integrally tied to the likelihood of success of any Daubert challenge that counsel may be considering during the early stages of federal civil litigation. Preparation of the expert disclosures, preceded by designation of the expert, forces the parties to focus carefully on the issues and the admissible evidence that supports or refutes their position. It forces counsel to consider at an early juncture the viability and most feasible means of mounting an effective Daubert challenge. Exchanging expert disclosures not only assists the trial court and parties in identifying and narrowing the issues, but if the disclosures contained in an expert’s written report have been made as Rule 26 contemplates, the parties may consider dispensing with the expense and burden of taking expert depositions.

To Depose or Not to Depose Experts?

Some seasoned, grizzled old trial lawyers are creatures of habit, however, inclined to depose their opponent’s expert as reflexively as breathing. These members of the “old dog/new tricks” school may treat an opposing expert’s deposition like any other routine part of pretrial preparation, regardless of the likelihood that such a course may well educate the deposed expert more than the deposing attorney. On occasion, however, these lawyers may have a good reason to depose their opponent’s expert. A framed photo is on the west wall of the library of a retirement home near D.C. in which my uncle and namesake lives. It is said that the widows of four-star generals
outnumber the staff there. The photo is of an F-15 in almost vertical ascent, streaking by a single-seat F-51 Mustang. Inscribed at the base of this framed photo it this reminder: "Youth, Energy and Ambition Are No Match For Old Age and Treachery."

Rule 26 Disclosure

A further benefit of expert disclosures made in accordance with the rules is that the court will be informed of limitations and restrictions on expert evidence. Disclosures made under the rules force the proponent of an expert to be prepared to try the case, with a minimal risk of surprise at trial, improvement of the opponent’s trial preparation, and increased effectiveness and efficiency of cross-examination. The Federal Judicial Center’s Reference Manual on Scientific Evidence emphasizes the serious consequences of Rule 26 expert disclosures:

It is advisable for the court to impress on counsel the seriousness of the disclosure requirement. Counsel should know that opinions and supporting facts not included in the disclosure may be excluded at trial, even if they were testified to on deposition. Also, Rule 26(a)(2)(B) requires disclosure not only of the data and materials on which the expert relied but also those that the expert “considered … in forming the opinion.” Litigants may therefore no longer assume that materials furnished to an expert by counsel or the party will be protected from discovery. Destruction of materials furnished to or produced by an expert in the course of the litigation - such as test results, correspondence, or draft memoranda – may lead to evidentiary or other sanctions. In addition, under the rule, an expert’s disclosure must be supplemented if it turns out that any information disclosed was, or has become, incomplete or incorrect. Failure of a party to comply with the disclosure rules may lead to exclusion of the expert’s testimony at trial, unless such failure is harmless. Reference Manual on Scientific Evidence 49-51(2d ed. Fed. Jud. Ctr. 2000)

VI. Preserving the Daubert Record on Appeal

A recurring theme in appellate litigation involving Daubert challenges in the trial court is that an adequately developed record and specific findings contained in that record must support the trial court’s decision to admit or exclude expert opinion testimony. See, e.g., Dodge v. Cotter, 312 F. 3d 1212 (10th Cir. 2003), cert. denied, 531 U.S. 825 (2003). When contemplating a Daubert challenge, protect the record. Moreover, counsel should bear in mind both the initial holding of Daubert and the legislative response in the form of amendments of the Federal Rules of Evidence, keeping uppermost in her mind that it is just as important to make and preserve the record for appeal as it is to prevail on a Daubert challenge in the district court.

An issue recently addressed by the Seventh Circuit was whether a Daubert challenge of a neurosurgical expert on the cause of a pretrial detainee’s death was properly preserved for appeal. In Moreland v. Dieter, 395 F. 3d. 747 (7th Cir. 2005) counsel for the defendants interposed an objection during the testimony of plaintiff’s neurosurgical expert, when the expert was asked if he had an opinion as to where the injury causing the detainee’s death occurred, and that defense objection based on hearsay was overruled by the trial court. The Seventh Circuit noted that there was not even a “germ of a Daubert challenge in this objection,” id. at 756, and reasoned that the failure of defense counsel to address the Daubert challenge to this specific expert witness’s testimony at trial resulted in forfeiture of the Daubert issue on appeal, notwithstanding the fact that the record showed the defendants had challenged the expert testimony of another expert under Daubert before trial, as to which the Seventh Circuit noted the Daubert challenge to the testimony
of a different expert would not suffice to preserve the argument against the plaintiff’s neurosurgical expert in this case.

Need for Complete Record

Counsel must appreciate the consequences of a complete record on appeal as opposed to one that omits key documents that would otherwise enable the appellate court to evaluate properly the district court's Daubert ruling. The battle over the admissibility of scientific and other technical evidence from a particular field of expertise or specialized knowledge will be fought out in the district court, and the appellate court will be constrained by the "abuse of discretion" standard in its review. This means that the more thorough and complete the record on appeal, showing precisely what was presented to the district court in advance of its decision on the admissibility or inadmissibility of expert evidence under the Daubert trilogy, the more likely an appellate court will be able to apply that standard of review in an accurate manner that fairly reflects the nature, evidentiary basis and justification for the district court's decision. Conversely, a spotty appeal record that omits all the necessary facts, legal arguments, objections and exhibits relevant and necessary to the resolution of the Daubert issue will more likely show up on the summary calendar.

VII. Exposing the Unreliable Opposing Expert

A motion in limine is not the sole weapon at the litigator’s disposal in challenging unreliable expert testimony, but it can have a lethal impact in conjunction with other pretrial and trial procedures. "Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. Ct. at 2798. In his second edition of Examining Witnesses 413-15 (ABA Section of Litigation 2003), Michael Tigar provides a crisp analysis of how a trial lawyer can use motions in limine, voir dire and cross-examination effectively to expose the unreliability of an opposing expert's opinion:

Almost by definition, the expert was not present at the crucial event – did not see the shooting, attend the allegedly conspiratorial meeting, or watch the patient ingest a controlled substance. The expert is expressing an opinion based on facts found from investigation or furnished by others. [F.R.E. Rule 803(18)] permits reliance even upon inadmissible evidence if it is of a type reasonably relied upon by experts in her field in forming their opinions. Admissible or inadmissible, observed or provided, patent or inferred – the expert's facts are simply the working assumptions of someone who was "not there." In limine, on voir dire, or in cross examination, you must be alert to identify facts and data that are an impermissible basis for the expert's opinion because they are not reasonably relied upon. Some testimonial experts have become such high-volume hacks that they don't do their homework, preferring to rely upon summaries furnished by litigation support staff. Expertise means specialization in some science or art outside the courtroom that is then brought to the jury. "Testifying about something" is not a form of independently admissible expertise. (emphasis added).

Liberal Construction of Expert Qualification Requirements

Expert qualification requirements are construed liberally by most courts. A typical example is found in State of New York v. Solvent Chemical Co., Inc., 218 F. Supp. 2d 319 (W.D.N.Y. 2002), a third-party action stemming from a CERCLA proceeding initiated by the State of New York, in which one of the issues before the court was ultimate liability for site cleanup and other remedial actions at a site contaminated with chlorobenzene and
other chemicals. In denying a defense motion to strike the expert report and preclude the expert testimony of Dr. Bruce Nauman on the ground that he was unqualified, his conclusions lacked foundation and were unreliable and not helpful to the court, the district court addressed the core question of whether the expert’s testimony satisfied the *Daubert* factors. The court began its analysis by noting, in the Second Circuit, that experts “should not be required to satisfy an overly narrow test of his own qualifications” and that “assuming that the proffered expert has the requisite minimal education and experience in a relevant field, courts have not barred an expert from testifying merely because he or she lacks a degree or training narrowly matching the point of dispute in the lawsuit.” *Id.* at 332.

**Wide Latitude**

With a Ph.D. in chemical engineering, expertise in chemical reaction engineering, authorship of books which discussed chlorinated benzenes as examples of reaction mechanisms, work experience as product manager for Union Carbide, research, consulting and marketing work involving petrochemicals, Dr. Nauman was found to have the knowledge, experience, training and education that rendered him sufficiently qualified as an expert to offer his opinion regarding the controversy in this case. The court in the exercise of its gatekeeping function noted that “[t]he federal rules are weighted on the side of admissibility when analyzing whether an opinion constitutes scientific knowledge,” and concluded that the elements of admissibility were satisfied by Dr. Nauman, whose testimony was based on his extensive experience as a chemical engineer, and his expert report was based on sources that appeared to be reputable and authoritative, culled from his own research. The court found that any inaccuracies in his report and deposition could be tested in the crucible of cross-examination. *Id.* at 334. After concluding that Dr. Nauman was qualified and his testimony was relevant, reliable and helpful, the Court in *Solvent Chemical* held that the *Daubert* factors were unnecessary to be met since the case did not present issues of “junk” science or involve new scientific methods. Despite the expert’s lack of personal knowledge of chlorobenzenes, the court overruled the *Daubert* objections and reasoned that *Daubert* and the Federal Rules of Evidence gave expert witnesses wide latitude to offer opinions, including those that are not based on firsthand knowledge or observation.

**Flexibility in Evaluating Qualifications**

In order to determine whether a proffered expert witness is qualified to render an opinion in a particular case, the courts have generally evaluated qualifications with liberality and flexibility. The district court described how this evidentiary “rule” is to be applied in *TC Sys. Inc. v. Town of Colonie, N.Y.*, 213 F. supp. 2d 171,174 (N.D.N.Y. 2002):

> [T]he court must first ascertain whether the proffered expert has the educational background or training in a relevant field. Then the court ‘should further compare the expert’s area of expertise with the particular opinion the expert seeks to offer and permit the expert to testify only if the expert’s particular expertise enables the expert to give an opinion that is capable of assisting the trier of fact.

**Rule 702’s Rejection of Frye**

The Fifth Circuit in *Christophersen v. Allied-Signal Corp.*, 939 F. 2d 1106, 1112-13 (5th Cir. 1991) observed that credentials touted by a proffered expert, although they may be significant, were not necessarily determinative. “The questions, for example, don’t stop if the expert has an M.D. degree. That alone is not enough to qualify him to give an opinion on every conceivable medical question.” *Christophersen* was overruled by *Daubert*, 509 U.S. at 587 n5. The premise of *Christophersen* was that the *Frye “general acceptance*
within the relevant scientific community” standard co-existed with the Federal Rules of Evidence. *Hucker v. City of Beaumont*, 147 F. Supp. 2d 565, 569 (E.D. Tex. 2001) (“The Fifth Circuit considers *Christophersen* to be overruled by *Daubert* except for incidental points of reasoning unrelated to the *Daubert*-type analysis.”) It did not. *Frye* was jettisoned by Rule 702.

**Lack of Extensive Practical Experience Not Dispositive**

In *Rondout Valley Central School District v. The Conoco Corp.*, 321 F. Supp. 2d 469 (N.D.N.Y. 2004), a school district’s breach of contract action arising from Conoco’s alleged failure to complete a cogeneration facility as an energy conservation project, the plaintiff school district hired a civil engineer to provide expert opinion testimony on damages and to explain the construction, design and energy conservation measures contemplated by the contract. The defendant contended that the plaintiff’s expert was “nothing more than just a hired gun” in view of his wide range of expertise that rendered him incapable of addressing the engineering elements relevant to the case. The district court held that even if the defendant’s contentions were accepted at face value, his “lack of extensive practical experience directly on point does not necessarily preclude an expert from testifying.” *Id.* at 475. The defendant attacked the qualifications of the plaintiff’s expert, raising “a bevy of cases in which various courts rejected” the expert’s testimony, suggesting unreliability. The expert defended his expertise by countering “with an equal number of cases in which his opinion testimony was accepted.” *Id.* at 476. The court also rejected the defendant’s attack on the reliability of the expert’s report and testimony, concluding that the five *Daubert* factors “are not the *sine qua non* or meant to be definitive but only helpful and instructive,” and rejected the defendant’s entreaty “to conduct an analysis of the expert’s methodology based on scientific evaluation and strictly employ those evaluative factors enunciated in *Daubert*.” *Id.* at 478. The court found this standard was inapplicable, noting that “a court may consider one or more of the *Daubert* factors but did not necessarily have to follow to the letter the *Daubert* paradigm.” *Id.* at 478.

In many cases, those proposed factors may not be relevant as to technical or specialized principles pertinent to the nature of the case, and the subject of the testimony. To the extent that those proposed factors constitute a reasonable measure of the reliability of the expert’s testimony, then they should be considered. If they are otherwise inadequate, the court has broad latitude to consider other and similar factors in evaluating reliability and relevance of a particular discipline. The main course then is that the courts apply flexibility when testing reliability. *Id.* at 478. (internal citations omitted).

The court found that whether the *Daubert* factors or other factors were employed, the expert’s report reflected “a reasonable modicum of reliability as a method of calculating present and future damages,” and his methodology bore “a remarkable resemblance to that of economists’ reports and valuations, and, to be candid, there exists very little deviation from those standard economic valuation processes.” *Id.* at 478. While the defendant may disagree with some of the factors used by the expert to calculate damages, the court emphasized that its responsibility was to “weigh the reliability of methodology and not its ultimate conclusion,” *id.* at 478, and that the defendant’s numerous objections to the expert’s report and anticipated testimony did not address admissibility but were better reserved for the trier of fact’s scrutiny. *Id.* at 479.

**The “Fit” Test**

At the time the Supreme Court decided *Daubert*, the case was limited to scientific evidence. *Daubert*’s two-part analysis of scientific expert testimony required the trial judge to determine whether (1) the testimony was based on reliable scientific methodology that could be objectively and
independently validated, and (2) there was a “fit” between the testimony and a disputed issue. Some courts, reflecting Joiner’s emphasis on the “analytical gap between the data and the opinion offered,” have excluded expert opinion testimony as unreliable where a wide analytical gap was shown to exist between the opinion and scientific knowledge. *Moore v. Ashland Chem., Inc.*, 151 F. 3d 269, 279 (5th Cir. 1998).

**Varying Approaches to Determining “Fit”**

Post-*Daubert*, the courts have taken a variety of approaches in interpreting the “fit” when assessing scientific and other technical evidence proffered by expert witnesses. Lack of fit between the facts of a case and proffered expert testimony has resulted in exclusion of expert evidence in a number of cases. Some courts have characterized the "fit" of expert evidence in terms of witness qualifications to testify, "comparing the area in which the witness has superior knowledge, skill, experience, or education with the subject matter of the witness's testimony." *United States v. Diallo*, 40 F.3d 32, 34 (2nd Cir. 1994); *United States v. Lewis*, 954 F.2d 1386, 1390 (7th Cir. 1992)).

**Helpfulness to Jury**

The "fit" under *Daubert* has been evaluated in terms of helpfulness to the jury, as in *United States v. Lilly*, 37 F. 3d 1222 (7th Cir. 1994), a prosecution of a Baptist minister and his wife for tax evasion, in which the Seventh Circuit held that the expert testimony of a proffered witness who was to testify about the general duties of Baptist ministers’ wives was properly excluded by the district court for lack of fit, since the witness’s expertise on the general duties of ministers’ wives, ‘without specific reference to whether those duties would render a minister’s wife incapable of willingly evading tax,” would not have been helpful to the jury in determining the issue of intent.

**Tendency to Prove Material Factual Issue**

The fit test has also been applied to exclude proffered expert evidence which had no tendency to prove a material factual issue in the case, as in *United States v. Scholl*, 166 F. 3d 964 (9th Cir. 1999), a criminal prosecution for filing false tax returns in connection with defendant’s gambling activities. There the court assessed expert testimony that pathological gamblers have distorted thinking and denial, impacting their ability to keep records of wins and losses. The court excluded the testimony under the fit test. The Ninth Circuit reasoned that such testimony did not tend to show that the defendant actually believed his tax return correctly reported wins and losses and at best would not prove that one could be rendered incapable of remembering what occurred or to enter both wins and losses on his Form 1040.

**Lack of Fit With Facts of Case**

In *Cipollone v. Yale Indus. Prods., Inc.*, 202 F. 3d 376 (1st Cir. 2000), a product liability action brought by a plaintiff who injured his hand while working on a loading dock, the First Circuit excluded expert testimony proffered by the plaintiff since it did not fit the facts of the case, where the expert’s testimony related to the relative size of a person’s hand grasping an object and a gap between the docklift and catwalk, but the plaintiff was not grasping anything at the time of the accident.

**Lack of Fit With Central Issue**

In *United States v. Powers*, 59 F. 3d 1460 (4th Cir. 1995), a prosecution of defendant for sexual abuse of his minor daughter, the Fourth Circuit held that the testimony of plaintiff’s expert concerning the results of a penile plethysmograph test offered to prove that the defendant did not exhibit
characteristics of a “fixated pedophile,” violated *Daubert’s* fit test, since the defendant was charged with statutory rape of his daughter, not with being a “fixated pedophile,” and since the defendant offered no evidence that persons “who are not fixated pedophiles are less likely to commit incest abuse.”

**Expert’s Theory Not Linked to Specific Facts, Despite Sound Methodology**

Failure of an expert to link his theory to the specific facts of the case may result in exclusion of the expert's testimony, even though the research utilized by the expert may rest on sound methodology and the expert may be well qualified in his or her field of expertise. For example, in *United States v. Mamah*, 332 F.3d 475 (7th Cir. 2003), while he was in police custody, a Ghanaian immigrant confessed to drug possession, but later recanted. At trial, the Ghanaian defendant called as an expert an anthropologist and a sociologist to give expert opinion testimony that Ghanaians are confession-prone, because Ghana is governed by an oppressive military regime. The trial judge excluded this expert testimony, and upon conviction, the Seventh Circuit affirmed, holding that the testimony was properly excluded since (1) neither expert was a clinical psychologist qualified to assess the Ghanaian defendant's susceptibility to interrogation techniques; (2) the defendant had lived in the United States for over fifteen years; and (3) the defendant did not show any similarity between the tactics used by arresting officers and interrogation techniques used in Ghana. The Court reasoned that the proffered expert testimony failed to satisfy Fed. R. Evid. 702, in that while the experts may have been qualified in their respective fields, and their research may have been methodologically sound, they relied on insufficient facts and data to link their theories to facts of case, which involved non-coercive interrogation in America, not coercive interrogation in Ghana.

A disagreement bordering on a split in the circuits has developed with regard to application of the fit test, as described in most recent edition of The Federal Judicial Center’s *Annotated Manual For Complex Litigation*:

This disagreement has turned in part on whether the inquiry under Rule 702 looks only at the admissibility of the expert evidence … separate from any inquiry into its sufficiency. In some cases the courts have excluded expert testimony as lacking relevance where it was insufficient to prove the matter for which the party sought its introduction. Other courts have held that the evidence need only meet a low threshold of “relevance” to be admissible. These decisions limit the trial court, once the methodology underlying expert testimony is found to be appropriate or reliable, to determining whether the testimony is pertinent to an issue in the case in order to be admissible. Courts adhering to this latter view have maintained that litigants need only “demonstrate by a preponderance of the evidence that their opinions are reliable,” and they are not required to “prove their case twice.” Under this view of the fit test, an expert’s testimony, even though insufficient to prove causation when viewed alone, would be admissible for consideration by the jury collectively with all the other evidence in the case.


It should be noted that while the Manual expressly states it is not "intended for citation as authority on points of law or as a statement of official policy," the federal courts regularly cite it in exactly that fashion. *Arizona v. California*, 460 U.S. 605, 649 n5 (1983); *In re Santa Fe Int'l Corp.*, 272 F. 3d 705, 710 (5th Cir. 2001).
Analytical Gap Between Scientific Principle and Facts of Case

The fit test has also been applied to exclude evidence based on the nature of the scientific principle or technique at stake or the degree to which it differs from the facts at issue, as in Bourne v. E.I. DuPont De Nemours & Co., 189 F. Supp. 2d 482 (S.D. W.Va. 2002), in which the district court found that the methodologies used by experts who extrapolated animal studies to humans was unsound and a poor fit for the facts of the case. Similarly, in Bradley v. Armstrong Rubber Co., 130 F. 3d 168, 176-78 (5th Cir. 1997), the court found that expert opinion evidence could be properly excluded on grounds of irrelevance where the facts on which the opinion was based were erroneous. In Mitchell v. Gencorp, Inc., 165 F. 3d 778, 782 (10th Cir. 1999), the Tenth Circuit upheld exclusion of expert opinion testimony as unreliable, reasoning that “without scientific data supporting their conclusions that chemicals similar to benzene caused the same problems as benzene, the analytical gap in the expert’s testimony is simply too wide.”

Sufficiency of Relationship Between Expert Testimony and Facts

These iterations of the fit test can be reconciled in a broad sense by adhering to a fundamental principle established in Daubert: When the trial judge undertakes the gatekeeper function, the relevant question is whether there is a sufficient relationship between the proffered expert testimony and the facts of the case. In other words, is the testimony “sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute?” Daubert, 509 U.S. at 591. The trial judge in the exercise of her broad discretion should have exclusive responsibility for making that determination of sufficiency.

Rule 104(a) Motion and in Limine Hearing

The admissibility of evidence that turns on a factual issue is determined by a procedural mechanism in which the respective roles of judge and jury are preserved. Rule 104(a) of the Federal Rules of Civil Procedure embodies the common law principle that the judge and not the jury determines preliminary questions of fact that determine the admissibility of evidence. It is used when foundational facts are in issue. This is the text of the rule:

Preliminary questions concerning the qualification of a person to be a witness, the existence of a privilege, or the admissibility of evidence shall be determined by the court, subject to the provisions of subdivision (b). In making its determination it is not bound by the rules of evidence except those with respect to privileges.

No Absolute Requirement for Hearing

While an in limine hearing is generally recommended before a trial judge makes a Daubert determination, however, it is not absolutely required. Lauzon v. Senco Prods., Inc., 270 F. 3d 681, 685-86 (8th Cir. 2001). The only specific, express, legal requirement is that before the district court makes its decision, the parties should have an adequate opportunity to be heard. Nelson v. Tennessee Gas Pipeline Co., 243 F. 3d 244, 249 n3 (6th Cir. 2001); Cortes-Irizarry v. Corporacion Insular De Seguros, 111 F. 3d 184, 188 n3 (1st Cir. 1997). That “adequate opportunity” was held to have been provided in Group Health Plan v. Philip Morris USA, Inc., 344 F. 3d 753, 761 (8th Cir. 2003), where the parties were allowed to exceed the court’s normal page limits for summary judgment briefs as well as to present written submissions of experts in support of their argument. The caselaw is also clear that exclusion of testimony based on a Daubert analysis will be reviewed on appeal for an abuse of discretion, an extraordinarily high standard.
VIII. Credibility Assessments and Daubert’s Reliability Inquiry

Can an expert’s credibility be part of the Daubert reliability inquiry? Some courts have recognized that there is a “subtle and nuanced” relationship between evidence that bears on the credibility of an expert witness and a trial judge’s reliability analysis, while eschewing any bright-line approach to credibility evidence. In one Third Circuit case, Elcock v. Kmart Corp., 233 F. 3d 734 (3d Cir. 2000), cited in 3 S. Saltzburg, M. Martin & D. Capra, Federal Rules of Evidence Manual §702.02[11], at 702-57 (2002), the Court concluded that a trial judge may consider evidence relating to the expert’s credibility that bears directly on his methodology, as where an expert’s prior dishonest acts or misconduct “involve fraud committed in connection with the earlier phases of a research project that serves as the foundation for the expert’s proffered opinion.” The distinction between permissible and proscribed judicial inquiry into an expert’s credibility was aptly characterized by Judge Becker in Elcock:

[The fact that an expert witness falsely reported his salary on an income tax return has little if any bearing on the reliability of a diagnostic test he frequently employs, but the fact that the expert lied about whether his methodology had been subjected to peer review, or intentionally understated the test’s known rates of error, is a different matter entirely.

Credibility Attack Unrelated to Methodology

In cases where an attack on the expert witness’s credibility has no relationship to or any bearing upon the expert’s methodology, the Daubert reliability analysis does not provide a trial judge with the freedom to evaluate or assess the general credibility of the expert or the general persuasiveness of evidence. See Blake v. Pellegrino, 329 F. 3d 43, 48 (1st Cir. 2003) (“Where, as here, a piece of evidence rests upon a proper foundation, Rule 104(a) does not permit a trial judge to usurp the jury’s function and exclude the evidence based on the judge’s determination that it lacks persuasive force”). But cf. Elcock v. Kmart Corp., 233 F. 3d 734 (3d Cir. 2000) (“[U]nder certain circumstances, a district court, in order to discharge its fact-finding responsibility under Rule 104(a), may need to evaluate an expert’s general credibility as part of the Rule 702 reliability inquiry…. [I]t does not necessarily follow that the court should be given free rein to employ its assessment of an expert witness’s general credibility in making the Rule 702 reliability determination. To conclude otherwise would be to permit the court, acting in its capacity as a Daubert gatekeeper, to improperly impinge on the province of the ultimate fact-finder, to whom issues concerning the general credibility of witnesses are ordinarily reserved”). See generally E. Imwinkelreid, Trial Judges – Gatekeepers or Usurpers? Can the Trial Judge Critically Assess the Admissibility of Expert Testimony Without Invading the Jury’s Province to Evaluate the Credibility and Weight of the Testimony, 84 Marq. L. Rev. 1 (2000). Credibility evidence in that context goes to the weight to be accorded by the trier of fact. It can and should be brought out through vigorous cross-examination. Judicial weighing and assessment of such credibility evidence - relating to acts of fraud, dishonesty, or falsification completely outside the expert’s professional life- should not take place as part of the Daubert inquiry.

Preliminary Questions of Admissibility

Rule 104(a) governs preliminary questions of admissibility of evidence and provides the vehicle for many Daubert challenges. Daubert emphasized that “the trial judge must determine at the outset, pursuant to Rule 104(a)” whether a proffered expert will testify to scientific knowledge that will assist the trier of fact to understand or determine a factual issue. Daubert, 509 U.S. at 591, 113 S. Ct. at 2796 (emphasis added). The trial judge as gatekeeper
must have sufficient time to perform her gatekeeping responsibilities, and the parties must have adequate time for the proponent to present and defend the admissibility, and for the opponent to present a meaningful challenge to the admissibility. This must be done before the trial gets underway and the jury is seated in the jury box. The way to do it is found in Rule 104(a) of the Federal Rules of Civil Procedure, one of the obscure rules that lay dormant for decades until Daubert breathed life into it. Indeed, the Court in Daubert suggested that the objector to scientific testimony should raise the objection through a motion in limine as soon as possible. 113 S. Ct. at 2796. This is a task that calls for the active involvement of the trial judge, thorough preparation by counsel, and participation by the expert. Indeed, the judge and counsel in this scenario are much like the chicken who spoke of his “involvement” in breakfast, only to be reminded by the pig that the latter was “committed” to it. The expert in the crosshairs of a Daubert challenge might feel like that pig right before the bacon and eggs are served. As defense counsel mounting or defending such a challenge, you must think of several different levels as you enter this judicially monitored environment.

Rule 26 Report and Rule 104(a) Motion

Today one of the most favored vehicles for accomplishing the three-party task of a Daubert challenge is a Rule 104(a) motion supported by a complete, signed written report of the expert as required by Rule 26(a)(2), deposition excerpts, relevant exhibits and an abbreviated record that resembles the one typically developed in support of a Rule 56 Motion for Summary Judgment. In an ideal world, the parties will provide the trial judge with a complete and thorough record supporting the Rule 104(a) motion. They would do so far enough in advance of trial that the trial judge as the gatekeeper may fairly carry out her gatekeeping function without a formal 104(a) hearing. But we live in a less than perfect world. Lawyers continue to struggle mightily to meet motion deadlines in multiple cases, often in multiple jurisdictions. While avoiding hurricanes, bird flu, computer viruses and floods, they may handle the demands of civil litigation files with somewhat less finesse than Ed Sullivan's famous Bulgarian saucer jugglers. And they do so while trial judges look for light at the end of the docket tunnel.

Preliminary Assessment Under Rule 104(a)

Under Daubert, a trial judge faced with a proffer of expert scientific testimony or other expert evidence must determine, pursuant to Rule 104(a) of the Federal Rules of Civil Procedure, whether the expert is proposing to testify to (1) scientific or other specialized knowledge that (2) will assist the trier of fact to understand or determine a fact in issue. The trial judge must make a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid. She also must determine as a preliminary matter whether that reasoning or methodology properly can be applied to the specific facts in issue. The preferred expert testimony must be supported by appropriate validation under the "testability" factor of Daubert. It must have a valid connection to the pertinent inquiry. The methodology used by the expert, moreover, must carry sufficient indicia of reliability to warrant submission to a jury under Daubert and must be relevant to the case before the court. See, e.g., Daubert v. Merrell Dow Pharmaceuticals, Inc., 43 F.3d 1311, 1315-16 (9th Cir.1995). Quite a tall order for a preliminary inquiry.

IX. Daubert’s Focus on Novel Principles and Causation

Donald Patterson, recipient of DRI's First Award for Lifetime Contribution to the Profession, addressed the efficacy and need for Rule 104(a) Motions in For the Defense 24 (Jan. 2005). Citing the growing need for 104(a) motions, Patterson pointed out that Daubert is not concerned with "[o]pinions that apply known principles," but it does come into play when the principle being applied is itself novel, questioned, and often involves
questions of causation. D. Patterson, The Rule 104(a) Motion as a Necessary and Useful Tool, For the Defense 24, 25 (Jan. 2005). Given the time-consuming nature of the process by which the Daubert factors are applied, the fact-intensive nature of a challenge to the reliability of expert testimony, and the purpose of the Daubert analysis, which includes measuring the required quality and strength of an inductive inference, Patterson notes that:

the court must be allowed the time required to perform the gatekeeping function, [and] fairness requires that the proponent of expert testimony be given an opportunity, prior to trial, to fulfill reliability requirements after it is initially challenged. Id. at 25-26.

See generally 29 C. Wright & V. Gold, Fed. Prac. & Proc. §6266, at 44-50 (Supp. 2005) ("while 'principle' refers to the theories an expert employs to explain observed facts, 'method' refers to how the expert derives those theories").

See generally L. Finley, Guarding the Gate to the Courthouse: How Trial Judges are Using Their Evidentiary Screening Role to Remake Tort Causation Rules, 50 Def. L.J. 49 (No. 1 2001).

Rule 104(a)'s Parameters

There are several key decisions addressing Rule 104(a). In Kirstein v. Parks Corp., 159 F. 3d 1065 (7th Cir. 1998), a summary judgment discovery record was held an adequate alternative to a Rule 104(a). The trial judge had an opportunity to consider reliability and relevance prior to the time the judge is under the pressure of a jury trial. In Jahn v. Equine Services, Inc., 233 F. 3d 382 (6th Cir. 2000), the Sixth Circuit reversed the trial court's ruling that a Rule 104(a) hearing was not required, since record was not complete enough to determine that the expert's opinion was admissible. In Oddi v. Ford Motor Co., 234 F. 3d 136 (3rd. Cir 2000), the Third Circuit concluded that a Rule 104(a) hearing may not be required if the trial judge had an adequate pretrial opportunity to determine reliability of the expert's opinion testimony within the relevant field of knowledge. In Elsayed Mukhtar v. Cal State University, 299 F. 3d 1053 (9th Cir. 2002), the Ninth Circuit reversed the trial court's admission of expert testimony without a Rule 104(a) hearing. It reasoned that while a hearing might not necessarily be required, a meaningful determination of reliability must be made pretrial by some means when a challenge to admissibility of expert testimony is made. In Dodge v. Cotter Corp., 328 F. 3d 1212 (10th Cir. 2003), the defendant repeatedly requested a Rule 104(a) hearing, and the trial court responded by imposing severe restrictions on the length of briefs and the amount of time for the hearing itself. The Tenth Circuit reversed and remanded for a new trial, holding that while the trial court had discretion to determine the manner in which it conducted its Daubert reliability and relevance analysis, it has no discretion to forego actually performing its gatekeeping function.

Daubert's Timing Jurisprudence

A "timing jurisprudence," as Donald Patterson termed it, is beginning to appear in Daubert litigation. An untimely Daubert motion filed late in the trial process can result in waiver. In Macsenit v. Becker, 237 F. 3d 1223, 1131 (10th Cir. 2001), for example, a Daubert challenge did not occur until after the plaintiff's expert testimony had already been admitted at trial. The Tenth Circuit held that the defendant "forfeited the opportunity to subject the expert testimony of [plaintiff's experts] to a Daubert challenge by failure to make a timely objection before that testimony was admitted." See also Torbit v. Ryder Sys., 2005 U.S. App. LEXIS 15433 *9 (8th Cir. July 28, 2005) (where party had not challenged, either in the trial court or on appeal, an opposing expert's qualifications or the scientific validity of her methodology, and had not questioned whether her evidence was of the type generally relied upon by
experts in the field, the Eighth Circuit held that a *Daubert* hearing was not required).

**Not Limited to Challenge at Trial**

If there is no waiver issue as in *Macsenti v. Backer*, supra, *Daubert* should not be viewed as just a time-of-trial phenomenon. True enough, the best operating environment for its complex, multi-factored, fact-intensive analysis required by the *Daubert* trilogy is the trial itself. Voir dire of an expert during a federal civil trial, with the jury in the box and the trial judge capable of gauging the reliability of expert evidence on a fully developed record, is not readily available in a Rule 56 summary judgment proceeding. The courts are often loathe to convert a Rule 56 proceeding into a minitrial, but more compelling considerations come into play when it becomes clear to the trial judge that a case’s survival hinges on a challenged expert. The gatekeeper standard has been applied accordingly in summary judgment proceedings the same way as at trial. In *Cortes-Irizarry v. Corporacion Insular*, 111 F. 3d 184 (1st Cir. 1997), for example, the First Circuit expressly rejected the plaintiff’s argument that *Daubert* was “strictly a time-of-trial phenomenon,” reasoning that

[t]he *Daubert* regime can play a role during the summary judgment phase of civil litigation. If proffered expert testimony fails to cross *Daubert*’s threshold for admissibility, a district court may exclude that evidence from consideration when passing upon a motion for summary judgment. . . . [A]t the junction where *Daubert* intersects with summary judgment practice, *Daubert* is accessible, but courts must be cautious—except where defects are obvious on the face of a proffer—not to exclude debatable scientific evidence without affording the proponent of the evidence adequate opportunity to defend its admissibility.

**Renewal of Objection or Proffer of Excluded Evidence at Trial**

When a trial judge makes a ruling on the record to admit or exclude expert evidence, whether at or before trial, the courts are divided over whether the aggrieved party is required to renew an objection or make an offer of proof in order to preserve claimed error for purposes of appeal, depending on whether the ruling is definitive or tentative. This is illustrated in *Walden v. Ga.-Pac. Corp.*, 126 F. 3d 506, 519 (3d Cir. 1997), where the Third Circuit held that when a district judge “makes a tentative in limine ruling excluding evidence, the exclusion of that evidence may only be challenged on appeal if the aggrieved party attempts to offer such evidence at trial.” In *Cook v. Sheriff of Monroe County, Fl.*, 402 F. 3d 1092 (11th Cir. 2005), the Eleventh Circuit stated that when a trial judge makes an in limine ruling tentatively to exclude evidence, “most courts require that the party seeking admission of the evidence offer the evidence again at trial in order to preserve the issue for appeal.” See also *Tennison v. Circus Circus Enters., Inc.*, 244 F. 3d 684, 689 (9th Cir. 2001); *Jenkins v. Keating*, 147 F. 3d 577, 581 (7th Cir. 1998); *United States v. Holmquist*, 36 F. 3d 154, 166 n12 (1st Cir. 1994).

**X. Advantages to Filing 104(a) Motion**

Finally, there are several distinct advantages to filing a Rule 104(a) motion, including the relaxed evidentiary environment – expressly stated in the final sentence of the rule – that enables the trial judge proceed without being bound by the Federal Rules of Evidence, except as to privileges. This is just another way of saying that the judge can accept signed expert reports without risking reversal for considering hearsay. While the trial judge conceivably can accept exhibits not formally identified or authenticated under the rules, conventional wisdom suggests that a party proffering exhibits provide a sponsor, authenticate the exhibits, and exercise due diligence in providing the trial judge with a competent documentary record to the extent
feasible. That is just good advocacy. Any seasoned jurist can tell you when a lawyer cares about her case, and when it is evident that she doesn't.

Judicial Notice

Another advantage to filing a 104(a) motion is that it gives the party challenging expert evidence the necessary time and opportunity to make a formal request for judicial notice pursuant to FRE 202.

If the opinion of the expert is of the type contemplated by amended Rule 702, where the expert applies well-recognized, accepted principles to the facts of a specific case so that the reliability of his opinion is basically a deductive analysis, judicial notice is an excellent way by which the court can be made acquainted with the applicable principles. D. Patterson, The Rule 104(a) Motion as a Necessary and Useful Tool, For the Defense, at 27-28 (Jan. 2005).

Not a Bean-Counting Exercise

As law students steeped in the Socratic method, many of us learned to articulate multifactor tests, multi-criteria standards, and other judge-made analytical frameworks, all geared to unearthing salient facts or reaching defensible conclusions. The unfortunate tendency exists, however, to convert these flexible yardsticks into mechanical measuring devices, giving or withholding the prize based on how many factors or criteria are present or lean one way or the other. That is not analytical thinking, and certainly not effective advocacy or principled analysis. Daubert motion practice is certainly not a bean-counting exercise. The question inevitably arises when proferred expert evidence meets some but not all of Daubert's principal factors, or when it meets only some but not all of the expanded list. What guides the trial judge in her exercise of the gatekeeper function then? Should a trial judge decide a Daubert motion based on a naked quantitative assessment of Daubert factors? What happens if some but not all of the factors lean one way?

The Eleventh Circuit addressed this knotty issue recently in U.S. v. Brown, --- F.3d ----, 2005 WL 1594456 at *9-10 (11th Cir. June 8, 2005): Should expert opinion evidence not meeting but half of the Daubert factors be admitted?" The Supreme Court made clear in Daubert that the factors set out there were not to be rigidly applied, but were guidelines for federal district courts applying Rule 702. The Court said, "[t]he inquiry envisioned by Rule 702 is, we emphasize, a flexible one," ... "[m]any factors will bear on the inquiry, and we do not presume to set out a definitive checklist or test… ."

Flexible Nature of Inquiry

Kumho elaborated on the flexible nature of the Daubert inquiry, pointing out that the list of specific factors did not necessarily or exclusively apply "to all experts or in every case." The applicability of Daubert factors to a given assessment of reliability will depend on the specific facts of the case, nature of the issue, particular expertise of the expert, and the subject of his testimony. Since application of the Daubert factors is a fact-dependent matter for each case, the Court emphasized that it could “neither rule out, nor rule in, for all cases and for all time the applicability of the factors,” nor could it do so “for subsets of cases categorized by category of expert or by kind of evidence.” Expert testimony not meeting all or most of the Daubert factors may at times be admissible, and Kumho drove home the point that whether Daubert's factors are reasonable measures of reliability in a particular case must be determined by the trial judge who is given broad latitude and whose reliability decision will be reviewed on appeal under the abuse of discretion
standard, a standard that gives the trial judge “considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable.”

Focus on Methodology Rather Than Conclusions

While *Daubert* calls for a flexible inquiry, the trial judge is cautioned to focus "solely on principles and methodology, not on the conclusions they generate." *Daubert*, 509 U.S. at 595. However, the Court would later qualify – some might say blur – this distinction by holding that the conclusions and methodology are not entirely distinct from one another, and that a "court may conclude that there is simply too great a gap between the data and the opinion proffered." While *Daubert* was decided in the context of scientific knowledge, moreover, the Supreme Court has extended its reasoning to "technical or other specialized knowledge." *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 141 (1999).

XI. Amendments to Rule 702 and Other Rules

In 2000, Rule 702 of the Federal Rules of Evidence was amended in response to *Daubert* to provide that:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

The 2000 amendment to Rule 702 “synthesizes the Supreme Court cases and lays out three requirements that all expert testimony must meet. The clarification and synthesis will be of great assistance to the bench and bar.” 3 S. Saltzburg, M. Martin & D. Capra, *Federal Rules of Evidence Manual* §702.02[10], at 702-49 (2002). The amendment makes it clear that reliable application of a method to the facts of a case is just as important as determining that the expert has used a reliable method.

Rules 701, 702, 703, and 403: Comparison and Contrast in Purpose and Function

The same reasons that lead a trial judge to exclude expert testimony under Rule 702 may contribute to its decision to exclude that same testimony under Rule 403 based on a finding that its probative value is outweighed by the danger of unfair prejudice or confusion of issues. S. Goode & O. Wellborn, *Courtroom Handbook on Federal Evidence* 366 (Thomson West 2005). This is in keeping with the Advisory Committee Notes to the 2000 Amendments to Rule 702. Indeed, Rules 702 and 403 “often make it difficult to tell when a court’s decision rests on one provision or the other.” 29 C. Wright and V. Gold, *Fed. Prac. & Proc. §6263*, at 194 (1997). Rule 702 has been described as a particularized but more demanding version of the relevance rules; moreover, since Rule 702 “demands more than what is required by the relevance rules” such as Rule 403. *Id.* at 194-95. “Thus, Rule 702 provides more power than Rule 403 to exclude evidence where its dangers are balanced against benefits.” *Id.* at 196. Relevance issues concerning expert testimony usually should be resolved under Rule 702. For the same reason, issues of admissibility concerning expert testimony should be resolved by the trial judge under Rule 104(a) rather than being treated as conditional relevancy issues under Rule 104(b). *Id.* at 195-96.
Rule 403 Balancing

While Rule 403 favors admissibility and vests in the trial judge a broad discretion to exclude evidence only when its probative value is substantially outweighed by its competing dangers of prejudice or confusion, Rule 702 “seems to require exclusion of expert testimony unless, after weighing costs and benefits, the court concludes that expert testimony on balance will help the trier of fact to accurately determine a fact in issue.” 29 C. Wright and V. Gold, Fed. Prac. & Proc. §6263, at 195 (1997). While Rule 702 is the primary focus of a trial judge’s gatekeeping role, the Court made it clear that the trial judge must also look to other rules. These other rules include Rule 703. Daubert, 509 U.S. at 590. Rule 703 permits an expert to rely upon hearsay. Experts traditionally have been permitted to rely on hearsay evidence in forming their opinions, and may present such evidence to the trier of fact to the extent necessary for the trier to understand the basis of their opinions. Under Rule 703, the guarantee of trustworthiness of the hearsay is that it be the kind normally employed by experts in the field. If the expert meets the Rule 702 test, he is assumed to have the skill to properly evaluate the hearsay, giving it probative force appropriate to the circumstances. In re Agent Orange Prod. Liab. Litig, 611 F. Supp. 1223, 1243 (E.D.N.Y), aff’d, 818 F.2d 187 (2d Cir. 1987). See also United States v Locascio, 6 F.3d 924, 938 (2d Cir. 1993) (“Expert witnesses can testify to opinions based on hearsay or other inadmissible evidence if experts in the field reasonably rely on such evidence in forming their opinions”). Rule 703 as amended in 2000 now provides:

The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence in order for the opinion or inference to be admitted. Facts or data that are otherwise inadmissible shall not be disclosed to the jury by the proponent of the opinion or inference unless the court determines that their probative value in assisting the jury to evaluate the expert’s opinion substantially outweighs their prejudicial effect.

Different Focus of Rules 702 and 703

Rule 702’s focus is on the manner in which the expert has acquired his expertise, whether through formal training, education, experience, lectures or reading, while the focus of Rule 703 is on the types of facts particular to the litigation that provide the basis for the expert’s opinion. (S. Goode & O. Wellborn, Courtroom Handbook on Federal Evidence 370 (Thomson West 2005)). Rule 703 normally relieves the proponent of expert testimony from having to lay an elaborate foundation with regard to the expert’s basis as a prerequisite to admissibility. 29 C. Wright and V. Gold, Fed. Prac. & Proc. §6262, at 186 (1997).

Some courts suggest that the line dividing the scope of [Rules 702 and 703] is drawn by the distinction between methodology and data: Rule 702 requires that the expert’s methodology is scientifically valid while Rule 703 requires that the expert’s data is reasonably reliable…. This scope problem is of consequence only if the “assist” standard established by Rule 702 and the “reasonably relied on” standard of Rule 703 are truly different. But if these standards are different, the consequences could be dramatic.

Research Data vs. Case-Specific Data

Professor Imwinkelreid described where to draw the line between Rules 702 and 703 in the following manner: “The fundamental dispute is whether the expression [in Rule 703] ‘the fact or data in the particular case,’ is limited to case-specific information or whether the expression also embraces research data. E. Imwinkelreid, Developing a Coherent Theory of the Structure of Federal Rule of Evidence 703, 47 Mercer L. Rev. 447, 451 (1996). Cf. Raynor v. Merrell Pharmaceuticals, Inc., 104 F. 3d 1371, 1374 (C.C. Cir. 1997) (concluding that Daubert “leaves obscure” the relationship between Rules 702 and 703).

Reasonable Reliance by Experts in Field

In analyzing an expert's data to determine if it is of a type reasonably relied on by experts in the field, the trial judge “should assess whether there are good grounds to rely on this data to draw the conclusion reached by the expert.” In re TMI Litigation., 193 F.3d 613, 697 (3d Cir. 1999). Moreover, the Daubert trilogy teaches that the factors which determine the reliability of evidence depend on the type of evidence offered, and in making this determination the trial judge can consider the validity of the methodology, whether the technique has been subjected to peer review and whether the expert properly applied her methodology. Daubert, 509 U.S. at 592-93. Under Rule 703, if the data underlying "the expert's opinion are so unreliable that no reasonable expert could base an opinion on them, the opinion resting on that data must be excluded." Id.

XII. Expert Testimony Based Solely on “Experience”

The Advisory Committee Notes to the 2000 Amendment to Rule 702 emphasized several times that the amended language was not intended to suggest that experience alone – or experience in conjunction with other knowledge, skill, training or education – may not provide a sufficient foundation for expert testimony. To the contrary, the text of Rule 702 expressly contemplates that an expert may be qualified on the basis of experience. In certain fields, experience is the predominant, if not sole, basis for a great deal of reliable expert testimony…. If the witness is relying solely on experience, then the witness must explain how that experience leads to the conclusion reached, why that experience is a sufficient basis for the opinion, and how that experience is reliably applied to the facts. Advisory Committee Notes to 2000 Amendment to Rule 702, Fed. Civ. Jud. Proc. & Rules 430 (2005 ed.).

Daubert on Remand

Notwithstanding the Ninth Circuit’s Daubert on remand decision (Daubert v. Merrell Dow Pharmaceuticals, Inc., 43 F. 3d 1311, 1319 (9th Cir. 1995)(“We’ve been presented with only the experts’ qualifications, their conclusions, and their assurances of reliability. Under Daubert, that’s not enough”), some courts have recognized that “lack of extensive practical experience directly on point does not necessarily preclude [an] expert from testifying,” and that a formal education in a particular field can suffice to qualify a witness as an expert. Valentin v. New York City, No. 94 CV 3911, 1997 WL 33323099, at *15 (E.D.N.Y. Sept.9, 1997).

The fact that a witness’s qualifications are not unassailable does not mean the witness is incompetent to testify: [r]ather “it is for the jury, with the assistance of vigorous cross-examination, to measure the worth of the opinion[s]. Valentin, 1997 WL 33323099, at * 15, quoting Fox v. Dannenberg, 906 F.2d 1253, 1256 (8th Cir.1990).
The Advisory Committee Notes to the 2000 Amendment to Rule 702, however, clearly invite judicial scrutiny of expert opinion testimony that is based “purely on experience,” as the Supreme Court suggested in *Kumho Tire Co. v. Carmichael*, 119 S. Ct. 1167, 1176 (1999), when it noted that “it will at times be useful to ask even of a witness whose expertise is based purely on experience, say, a perfume tester able to distinguish among 140 odors at a sniff, whether his preparation is of a kind that others in the field would recognize as acceptable.”

For example, an expert’s opinions stemming from his personal experience in the railroad industry were held to be based on a reliable application of principles and methods to the facts of the case. *Haager v. Chicago Rail Link, L.L.C.*, 2005 WL 2656383 (N.D. Ill. October 17, 2005). The expert in *Haager* had significant practical experience working as a locomotive engineer, worked as a consultant for two years advising on railroad operation issues, spent three years with the Federal Railway Administration in Washington, D.C. as an attorney, worked as a consultant and attorney and testified about or had been deposed on railroad issues in multiple cases in the past four years, Id. at *2, leading the court to conclude that the breadth of information he had consulted in formulating his opinions constituted sufficient facts or data under Rule 702 and that his opinions were based on a reliable application of his principles and methods to the facts of the case. Id. at *3.

**Rule 701 and Experience Acquired in Everyday Life**

Rule 701, the lay opinion rule as amended in 2000, does not distinguish between lay witnesses and expert witnesses, but rather between lay opinion and expert opinion. Under the 2000 amendment to Rule 701, opinions based on experience that amounts to “specialized knowledge” can be admitted only under Rule 702. Rule 701 as amended in 2000 provides:

> If the witness is not testifying as an expert, the witness’ testimony in the form of opinions or inferences is limited to those opinions or inferences which are (a) rationally based on the perception of the witness, (b) helpful to a clear understanding of the witness’ testimony or the determination of a fact in issue, and (c) not based on scientific, technical, or other specialized knowledge within the scope of Rule 702.

**Testimony Requiring Specialized Knowledge**

In *United States v. Shepard*, 188 F.R.D. 605, 608 (D. Kan. 1999), the trial judge held that law enforcement officers’ testimony regarding drug trafficking activities called for specialized knowledge and did not qualify as lay opinion testimony under Rule 701, even though the officers based their opinions on personal knowledge.

**Expert Opinion Disguised as Lay Opinion**

Similarly, in *United State v. Peoples*, 250 F. 3d 630, 641 (8th Cir. 2001), an FBI agent was erroneously allowed to give lay opinion testimony about the meaning of words and phrases used in a tape recording played in open court, giving what the Eighth Circuit characterized as “essentially expert testimony … under the guise of lay opinions.” The Court reasoned that “law enforcement officers are often qualified as experts to interpret intercepted conversations using slang, street language, and the jargon of the illegal drug trade,” but here the attempt to substitute lay opinion testimony subverted “the reliability requirements for expert testimony as set forth in *Daubert*….”

**Specialized Type of Experience Distinguished**

Opinions based on experience of the type acquired in everyday life are admissible under Rule 701, while “opinions based on experience of a
specialized sort can be admitted only under Rule 702.” 29 C. Wright and V. Gold, Fed. Prac. & Proc. §6263, at 30 (Supp. 2005). Testimony from the same witness may on occasion have to jump both the lay opinion hurdle of Rule 701 and the expert opinion hurdle of Rule 702. For example, in United States v. Figueroa-Lopez, 125 F. 3d 1241, 1246 (9th Cir. 1997), cert. denied, 523 U.S. 1131 (1998), law enforcement officers were permitted to testify as matter of lay opinion that the accused acted suspiciously, but were required to qualify as experts under Rule 702 before being permitted to testify that the accused used code words to refer to drug prices and quantities. As noted in S. Goode & O. Wellborn, Courtroom Handbook on Federal Evidence 359-60 (Thomson West 2005), moreover, “[a] witness may present both lay and expert testimony in the same case. Admissibility of the lay opinions will be governed by Rule 701; admissibility of the expert opinions, by Rule 702.” The 2000 amendment to Rule 701 was designed to “ensure that litigants cannot circumvent expert testimony rules by presenting expert testimony in lay witness clothing.” S. Goode & O. Wellborn, Courtroom Handbook on Federal Evidence 359 (Thomson West 2005). Of course, lay opinion testimony need not be restricted to matters that are within the jurors’ common knowledge, but must be rational, helpful and based on the witness’ personal knowledge.

Lay Opinion as Mere Speculation

Lay opinion testimony as to racial animus was improperly admitted in evidence by the trial court in Hester v. BIC Corp., 225 F. 3d 178, 184 (2d Cir. 2000). Hester was an employment discrimination action against an employer based on alleged racial discrimination. There the lay witness had testified that the supervisor’s harsh managerial style was motivated by racial animus. The Second Circuit held that he was merely speculating that the supervisor’s motives were not race-neutral.

Rule 701/702 Dichotomy

Several cases help illustrate this 701/702 dichotomy. In United States v. Griffin, 324 F.3d 330 (5th Cir. 2003), a criminal prosecution involving a fraudulent scheme to obtain federal tax credits for low-income housing, the prosecution proffered a former director of a state housing authority to testify to text of various state statutes and respond to hypothetical questions regarding their applicability. Over a defense objection that the witness was not lawyer and had not been qualified as expert, the trial judge permitted the testimony as lay opinion. The Fifth Circuit held that while it was error to admit this testimony as lay opinion, since the lay witness was not qualified to testify on points of statutory interpretation, the error was harmless because the testimony was cumulative.

In a criminal prosecution of a city treasurer for allegedly extorting campaign contributions from banks that held funds controlled by the treasurer’s office, United States v. Santos, 201 F. 3d 953 (7th Cir. 2000), prosecution witnesses with personal knowledge of the treasurer’s management style were erroneously permitted to testify that the treasurer had orders to cut off contractors unwilling to pay-to-play. The Seventh Circuit concluded that the inferences these lay witnesses sought to draw were too speculative to be admitted as evidence. It reasoned that

the inferences must be tethered to perception, to what the witness say and heard. What the witnesses here saw and heard was how Santos managed the office, but it was an impermissible leap to infer the existence of an express order by Santos on a particular matter.

Rule 701 Lay Opinion and Legal Conclusions

One area of Rule 701 lay opinion testimony that has been somewhat controversial revolves around opinions in law-related terms or opinions that
arguably amount to legal conclusions. Sometimes this is just a matter of counsel needed to exercise greater care in phrasing the question, and sometimes it is a matter of the witness using a legal term with a well-established lay meaning or a law-based term that has an accepted lay meaning and is used as a convenient shorthand device to assist the trier of fact and speed up the trial. For example, in a civil action based on claims of sexual harassment, the trial judge in Johnson v. Elk Lake School District, 283 F. 3d 138 (3d Cir. 2002), excluded evidence that the defendant has not been arrested. The Third Circuit affirmed, stating that

To the extent that a decision not to arrest is likely based on knowledge outside the personal experience of the law enforcement official responsible for the decision, it amounts to an inadmissible opinion under the Federal Rules of Evidence 702 and 701.


Lay Description of Conduct Not Legal Conclusion

In United States v. Koon, 34 F. 3d 1416 (9th Cir. 1994), two police officers involved in the beating of Rodney King after a high speed chase were tried on federal criminal charges for depriving an arrestee of civil rights, after a state trial had resulted in a mistrial on one count and acquittal on all other state counts. In the federal trial, testimony from the state trial of an officer on the scene was admitted against the two police officers. The officer as witness for the prosecution had testified that one of the federal defendants was “out of control” during the beating. Over an objection that this testimony was in effect saying that excessive force was used, where excessive force was the core issue for the federal criminal jury to decide, the federal district judge held the testimony admissible, and the Ninth Circuit upheld that ruling and the resulting federal convictions. The Court reasoned that the ultimate issue for the jury to decide “was not whether the defendants were out of control, but whether they willfully used unreasonable force.” The observation of the officer witness was helpful to the jury, a meaningful shorthand device to describe the conduct of one of the defendants, and rationally based on the officer witness’ personal perception of the beating of Rodney King. It is important to note, however, that while such colloquial terminology was found to be helpful to the jury, the officer’s testimony would have been excluded if he had used the legal buzzwords “excessive force.”

Characterizing Lay vs. Expert Opinion

The characterization of testimony as lay opinion or expert opinion has major consequences. If expert opinion, the testimony must comply with the special disclosure requirements for expert witnesses and must run the Daubert gauntlet for reliability and relevancy. If the testimony is expressed by a lay witness as an opinion or inference that is rationally based on the witness’ perception and will help the trier of fact to understand clearly the testimony or determine a fact in issue, it will likely be admitted, depending on the extent to which the testimony goes to the heart of the case, the extent to which the witness can provide concrete details and the amount of factual matter incorporated into the opinion. See, e.g., Government of Virgin Islands v. Knight, 989 F. 2d 619, 629-30 (3d Cir. 1993)(opinion that defendant fired gun accidentally admitted); Robinson v. Bump, 894 F. 2d 758, 762-63 (5th Cir. 1990)(opinion that truck driver was “in total control” when truck was struck admitted); United States v. Gaines, 170 F. 3d 72, 76-78 (1st Cir. 1999)(opinion about meaning of “code words” used by fellow co-conspirators admitted); Kostelecky v. NL Acme Tool/NL Industries, Inc., 837 F. 2d 828, 830 (8th Cir. 1988)(opinion testimony held not sufficiently helpful and excluded where it was merely evidence that “tells the jury what result to reach”).
Rule 403 Applicable to Lay Opinion

Lay opinion testimony admitted under Rule 701 may also have to clear the Rule 403 hurdle, as was done in United States v. Pierce, 136 F. 3d 770, 775-76 (11th Cir. 1998). In Pierce, defendant’s probation officer was allowed to give lay opinion testimony that an individual in a bank surveillance photograph was the defendant. In addition to upholding the admissibility of such lay opinion identification testimony under Rule 701, the Eleventh Circuit held that the trial judge did not abuse his discretion in admitting the lay opinion testimony under Rule 403, since this evidence was not the only source or even a primary source of the jury’s information related to the defendant’s background.

Rule 702 Proscription of Legal Conclusions

Under Rule 702, moreover, there is a similar prohibition against experts providing legal conclusions. Courts have recognized as axiomatic that “an expert is not permitted to provide legal opinions, legal conclusions or interpret legal terms; those roles fall solely within the province of the court.” Rondout Valley Cent. Sch. Dist. v. Coneco Corp., 321 F. Supp. 2d 469, 480 (N.D. N.Y. 2004), citing Hygh v. Jacobs, 961 F. 2d 359, 363-64 (2d Cir. 1994); Salas v. Wang, 846 F. 2d 897, 905 n5 (3d Cir. 1988); Highway Materials, Inc. v Whitemarsh Township, 2004 WL 2220974, at *20 (E.D. Pa. 2004) (excluding expert’s opinion that defendant’s actions satisfied the “shock the conscience” standard, since such opinion amounted to a “legal conclusion clearly within the purview of the court’s decision making power rather than a party’s expert”).

XIII. Applications of Rule 403 Balancing Test

Among the other rules that the trial judge must consider in carrying out her special gatekeeper function is Rule 403, Fed. R. Ev. Even if expert testimony is deemed admissible under Rule 702, it may still be excluded under Rule 403 if its probative value is substantially outweighed by the danger of unfair prejudice to the moving party. See United States v. Castillo, 924 F.2d 1227, 1232 n.9 (2d Cir. 1991); Karibian v. Columbia Univ., 930 F. Supp. 134, 144 (S.D.N.Y. 1996) ("Daubert makes it clear that the judge must be mindful of other applicable rules, including Rule 403"). Proof of unfair prejudice within the meaning of Rule 403’s balancing test, however, requires the party challenging the expert evidence to present more than isolated snippets of testimony taken out of context.

Unfair Prejudice

Under Rule 403, the trial judge may exclude relevant evidence "if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence." See Leopold v. Baccarat, Inc., 174 F.3d 261, 269 (2d Cir. 1999) ("Unfairness may be found in any form of evidence that may cause a jury to base its decision on something other than the established propositions in the case"); 2 Weinstein's Federal Evidence § 403.04[1][b], at 403-36 (2d ed. 1998) (construing Rule 403).

Deference Given to Rule 403 Ruling

As with Rule 702 determinations, matters of exclusion or inclusion of evidence pursuant to Rule 403 are left to the broad discretion of the district court. See Costantino v. Herzog, 203 F.3d 164, 173 (2d Cir. 2000) ("Because the trial judge is in the best position to evaluate the evidence and its effect on the jury, his Rule 403 rulings are entitled to considerable deference and will not be overturned absent a clear abuse of discretion").
Even if the trial judge deems expert testimony admissible under Rule 702, it is still subject to exclusion under Rule 403 if that rule's balancing test favors exclusion. See generally United States v. Castillo, 924 F. 2d 1227, 1232 n9 (2d Cir. 1991); United States v. Young, 745 F. 2d 733, 765 (2d Cir. 1984); Leopold v. Baccarat, Inc., 174 F. 3d 261, 269 (3d Cir. 1999) ("Unfairness may be found in any form of evidence that may cause a jury to base its decision on something other than the established propositions in the case"). A trial judge’s Rule 403 ruling, moreover, is entitled to considerable deference and will not be disturbed on appeal in the absence of an abuse of discretion. Hathaway v. Coughlin, 99 F. 3d 550, 555 (2d Cir. 1996).

Rule 403 Exclusion Without Daubert Analysis

If exclusion of evidence can be justified under Rule 403, moreover, any failure by the trial court to conduct a Daubert analysis of the same evidence will be disregarded. See Conti v. Commissioner, 39 F.3d 658, 662 (6th Cir. 1994) (affirming valid exclusion of unilateral polygraph examination results under Rule 403 and refusing to consider whether trial court conducted a proper analysis of the evidence under Daubert) and United States v. Sherlin, 67 F.3d 1208, 1216 (6th Cir. 1995), cert. den., 516 U.S. 1082 (1996) (Rule 403 exclusion provided independent basis for affirmance, rendering Daubert analysis unnecessary).

Claims of error with regard to the admission or exclusion of evidence under Rules 403 and Rule 702 "are prime candidates for application of the harmless error rule." C. Wright, A. Miller & M. Kane, Federal Practice and Procedure §2885 at 453--54). Even if a party is able to demonstrate trial error under Rule 702 or Rule 403, the lower court’s ruling will usually not be disturbed via post-trial motion in the district court or on appeal, unless the error was truly harmful. See Katt v. City of New York, 151 F. Supp. 2d 313, 353-54 (S.D.N.Y. 2001) ("Even if expert testimony is deemed admissible, however, it is still subject to exclusion under Rule 403 if its probative value is substantially outweighed by the danger of unfair prejudice to the moving party. See United States v. Castillo, 924 F.2d 1227, 1232 n. 9 (2d Cir.1991), citing United States v. Young, 745 F.2d 733, 765 (2d Cir.1984) (Newman J., concurring). See also Karibian v. Columbia Univ, 930 F.Supp. 134, 144 (S.D.N.Y.1996) ( ‘Daubert makes it clear that the judge must be mindful of other applicable rules, including Rule 403’)."

Rule 403 permits the trial judge to exclude relevant evidence “if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, cumulative evidence.” As with Rule 702 determinations, matters of exclusion or inclusion of evidence pursuant to Rule 403 are left to the broad discretion of the district court. See Costantino v. Herzog, 203 F.3d 164, 173 (2d Cir.2000) ( "Because the trial judge is in the best position to evaluate the evidence and its effect on the jury, his Rule 403 rulings are entitled to considerable deference and will not be overturned absent a clear abuse of discretion").

XIV. Discretion and Special Gatekeeping Obligation of Judiciary

The Supreme Court in Daubert was manifestly concerned with the impact on jurors of "junk science" testimony. This is a species of evidence in which an "expert" tries to provide a basis for liability by offering unorthodox opinions outside the range of generally accepted scientific theory. Reining it in was one of the primary motivations for the Court’s insistence that trial judges serve a "gatekeeping" function, Daubert, 509 U.S. at 589 n.7 & 596, whereby they were directed to assess "whether the reasoning or methodology underlying the testimony is scientifically valid," Id. at 592. See also Advisory Committee Note to Rule 702 (2000 Amendment) ("The trial court's
gatekeeping function requires more than simply taking the expert's word for it") (internal quotation marks omitted).

Expansion of Special Gatekeeping Function

Precedent has grown from a few hundred to thousands of reported decisions interpreting, expanding, sometimes contracting, the “special gatekeeping function” undertaken by the federal judiciary. As Article III judges became more accustomed to the task of running expert testimony through the gauntlet of a fact-intensive, multifaceted inquiry before being allowed to be heard by the trier of fact as reliable and relevant evidence, state courts were not exactly sleeping at the wheel. As conflicts surfaced in the circuits over the many nuanced meanings and applications of Daubert's factors, the gatekeeper role of trial judges in state courts developed at a galloping pace, but that is a discussion for another time and place. See generally A. Lustre, Post-Daubert Standards for Admissibility of Scientific and Other Expert Evidence in State Courts, 90 A.L.R. 5th 454 (2005).

Factors influencing a district court judge in her role as gatekeeper go beyond the judicial temperament and stare decisis. Further, “[a]s a practical matter, the focus is on principles and methodologies, not the conclusions generated. If an expert reaches conclusions that other experts in the field would not reach, however, the trial court may fairly suspect that the principles and methods have not been faithfully applied.” Advisory Committee Note to Rule 702, Fed. R. Evid., citing Lust v. Merrell Dow Pharm., Inc., 89 F.3d 594, 598 (9th Cir. 1996). The court must therefore look at the facts underlying the opinion, the methodology, and the link between the facts and the conclusion drawn. Heller v. Shaw Indus., Inc., 167 F.3d 146, 155 (3d Cir. 1999). Rule 702 as amended calls for the trial judge to make a quantitative rather than a qualitative analysis. For example, in a case where the trial judge may deem a particular expert opinion incorrect, especially where an expert relies on hypothetical facts or the reliable opinions of other experts, the trial judge is not prevented from finding that the expert testimony is based on sufficient underlying “facts and data,” provided the expert is employing principles, methods, or techniques that are reliable and are applied reliably to the facts of a particular case.

Trial Judge’s Perception of Gatekeeping Duty

One may try to read the tea leaves (KeyCite and Shepard's flavors) and thereby gain some degree of insight into the trial judge’s philosophy with respect to his or her “special gatekeeping obligation” in determining whether an expert's opinion is grounded on a reliable foundation, as well as insight into the nature and scope of the judge’s discretion in performing the gatekeeper function. The Eleventh Circuit characterized the trial judge’s gatekeeper role in Allison v. McGhan Medical Corp., 184 F.3d 1300, 1322-12 (11th Cir. 1999), a breast implant case, as it affirmed the trial judge’s exclusion of the plaintiff's causation experts:

The judge's role is to keep unreliable and irrelevant information from the jury because of its inability to assist in factual determinations, its potential to create confusion, and its lack of probative value.

Broadened Judicial Discretion in Addressing Expert Evidence

Rule 702 as amended in 2000 made no attempt to prescribe a procedural formula for trial judges to exercise their gatekeeping function with regard to expert testimony. It is clear, however, that the broad judicial discretion accorded the trial judge over the admission of evidence is “particularly broadened” when addressing admissibility or exclusion of expert evidence. BIC Corp. v. Far Eastern Source Corp., 23 Fed. Appx. 36, 38, 2001 WL 1230706, *1 (2d Cir. 2001). When the trial judge is called on to
determine if the expert testimony will be helpful to the trier of fact, moreover, this principle of broad judicial discretion most evident, *Bic Corp.*, 23 Fed. Appx. at 38, and in this regard "the trial court's view of helpfulness is entitled to deference." *George v. Celotex Corp.*, 914 F.2d 26, 28 (2d Cir. 1990) ("District court's determination of relevance will not be disturbed unless it evidences an abuse of discretion"). As the Advisory Committee Notes to the 2000 Amendment to Rule 702 emphasize, "[c]ourts have shown considerable ingenuity and flexibility in considering challenges to expert testimony under *Daubert*, and it is contemplated that this will continue under the amended Rule." Advisory Committee Notes to Amended Rule 701, Fed. Civ. Jud. Proc. & Rules 431 (2005 ed.).

**Deference in Bench Trials**

The principle of broad judicial deference is particularly profound when exercised in a bench trial, since the trial judge is presumed able to exclude improper inferences from her decisional analysis. *Schultz v. Butcher*, 24 F.3d 626, 631--32 (4th Cir. 1994) ("For a bench trial, we are confident that the district court can hear relevant evidence, weigh its probative value and reject any improper inferences"); 11 C. Wright, A. Miller & M. Kane, Fed. Prac. & Proc. § 2885 (2d ed. 1995) ("In nonjury cases the district court can commit reversible error by excluding evidence but it is almost impossible for it to do so by admitting evidence").

**Presumption of Admissibility of Evidence**

In *Daubert*, the Supreme Court recognized that Rule 702 intends to relax "the traditional barriers to opinion testimony," thus "reinforcing the idea that there should be a presumption of admissibility" of expert testimony. *Daubert*, 509 U.S. at 588. In *Borawick v. Shay*, 68 F.3d 597, 610 (2d Cir. 1995), a bench trial, the Second Circuit observed that in the final analysis, the utility of an expert's testimony should be resolved in favor of admissibility. See generally *TC Sys. Inc., v. Town of Colonie, N.Y*, 213 F. Supp. 2d 171, 174 (N.D.N.Y. 2002). The barriers to expert evidence once raised by *Frye* clearly have been more relaxed in bench trials, where the judge is serving as factfinder and is not concerned about "dumping a barrage of questionable scientific evidence on a jury." *Allison v. McGhan Med. Corp.*, 184 F.3d 1300, 1310 (11th Cir.1999).

**Relevance and Reliability Determinations in Bench Trials**

Expert evidence proffered in bench trials is not exempt from *Daubert* analysis. In *Seaboard Lumber Co. v. United States*, 308 F.3d 1283 (Fed. Cir. 2002), an action in the court of claims over lumber companies' failure to perform timber sales contracts with United States, the Court of Claims admitted testimony from a government expert on damages but rejected the Government's argument that *Daubert* does not even apply in bench trials. The Court reasoned that while bench trials pose no risk of jury confusion, *Daubert*'s requirements of relevance and reliability must still be satisfied. In this case, however, the government expert estimated damages by reference to time value of money, and lumber companies themselves employed the same basic methodology. The Court of Claims concluded that the trial judge properly found that any deficiencies in expert's methods went "only to the fine tuning of a relatively minor credit." Accordingly, the trial court did not abuse its discretion in admitting the expert testimony under the circumstances.

**Rejection of Expert Testimony as Exception Rather Than Rule**

The presumption of admissibility that flows from that more relaxed approach, moreover, is consistent with the observation by the Advisory Committee at the time of the 2000 amendment to Rule 702 of the Federal Rules of Civil Procedure. After conducting a survey of post-*Daubert* cases,
the Advisory Committee concluded that rejection of expert testimony is the "exception rather than the rule". Rondout Valley Cent. Sch. Dist. v. Coneco Corp., 321 F. Supp. 2d 469, 473-74 (N.D. N.Y., 2004). Further, the trial judge’s decision to admit expert testimony under Rule 702 is left to the broad discretion of the court and will be sustained unless manifestly erroneous. 3 J. Weinstein & M. Berger, Weinstein's Federal Evidence p. 702[02] (1981).

XV. Abuse of Discretion Standard and Daubert Rulings

The Eleventh Circuit gave an articulate explanation of how Daubert rulings interact with and are decided under the federal abuse-of-discretion standard for appellate review of evidentiary rulings in U.S. v. Brown, --- F.3d ----, 2005 WL 1594456 (11th Cir. July 8, 2005). The Court began its discussion by stating that it needed "to explain why it is difficult to persuade a court of appeals to reverse a district court's judgment on Daubert grounds." Id. at *6. If that isn't enough to make an appellant's counsel get a quick case of weak knees, nothing is. The Court continued:

What is true about the review of evidentiary issues in general applies with equal or even greater force to Daubert issues in particular, an area where the abuse of discretion standard thrives. ... Immersed in the case as it unfolds, a district court is more familiar with the procedural and factual details and is in a better position to decide Daubert issues. The rules relating to Daubert issues are not precisely calibrated and must be applied in case-specific evidentiary circumstances that often defy generalization. And we don't want to denigrate the importance of the trial and encourage appeals of rulings relating to the testimony of expert witnesses. All of this explains why "the task of evaluating the reliability of expert testimony is uniquely entrusted to the district court under Daubert," and why "we give the district court 'considerable leeway' in the execution of its duty." Rink v. Cheminova, Inc., 400 F.3d 1286, 1291 (11th Cir.2005) ... That is true whether the district court admits or excludes expert testimony. Joiner, 522 U.S. at141-42 ("A court of appeals applying abuse-of-discretion' review to [Daubert] rulings may not categorically distinguish between rulings allowing expert testimony and rulings disallowing it."). And it is true where the Daubert issue is outcome determinative. ...To be sure, review under an abuse of discretion standard does entail review, and granting considerable leeway is not the same thing as abdicating appellate responsibility. We will reverse when the district court's Daubert ruling does amount to an abuse of discretion that affected the outcome of a trial. ...

An abuse of discretion can occur where the district court applies the wrong law, follows the wrong procedure, bases its decision on clearly erroneous facts, or commits a clear error in judgment. ... In the Daubert context, if one of those types of serious error occur, we may conclude that the district court has not properly fulfilled its role as gatekeeper. We have also found that a district court abuses its discretion where it fails to act as a gatekeeper by essentially abdicating its gatekeeping role. Id. at *6-7.

Limits on Judicial Discretion

Broad judicial discretion notwithstanding, "[a] court is expected to reject any subjective belief or speculation." Ammons v. Aramark Uniform Services, Inc., 368 F.3d 809, 816 (7th Cir. 2004). “It is axiomatic that an expert, no matter how good his credentials, is not permitted to speculate.” Goebel v. Denver & Rio Grande Western R.R. Co., 215 F.3d 1083, 1088 (10th Cir. 2000). Furthermore, as a general rule, “an expert may not state his or her opinion as to legal standards nor may he or she state legal conclusions drawn
by applying the law to the facts.’” Okland Oil Co. v. Conoco Inc., 144 F.3d 1308, 1328 (10th Cir.1998).

Even if a trial judge grants a defense motion in limine and excludes as irrelevant the expert opinions of an opposing party’s expert, the court may exercise its discretion to “revisit” that ruling as the litigation progresses. The district judge took this approach in Hamilton County Emergency Communications District v. Orbach Communications Integrator Corporation, 2005 U.S. Dist. LEXIS 21639 (E.D. Tenn. August 25, 2005). It noted that while the expert’s analysis relied heavily on inference and extrapolation, the fact that his process and analysis was less than ideal did not necessarily render his opinion inadmissible; however, the court also emphasized that it was not required to admit opinion evidence connected to existing data only by the *ipse dixit* of the expert, and might conclude that there was simply too great an analytical gap between the data and the opinion offered.

At this point in time the Court defers ruling on the question of whether the shortcomings in Coperda’s testimony are a basis for exclusion or simply a matter to be left to vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof. Should Coperda’s opinions become relevant at some later date, the court will make a definitive ruling at that time. Because the court finds the expert opinions offered by Coperda are not relevant to any matter presently at issue in this litigation, the court will grant plaintiff’s motion in limine. However, the court reserves the right to revisit this ruling should events warrant.” *Id.* at *18.

XVI. Lack of Specialized Knowledge

The courts are generally reluctant to disqualify a proffered expert witness where it is shown that the witness has useful specialized knowledge, as the district court recognized in Palmer v. Ozbek, 144 F.R.D. 66,67 (D. Md. 1992). An expert’s lack of specialized or specific knowledge, on the other hand, may prove fatal to his proffered testimony, as occurred in City of Hobbs v. Hartford Fire Ins. Co., 162 F. 3d 576 (10th Cir. 1998). In Hartford, the insured city sued its liability insurer for breach of contract, unfair claims practices and bad faith refusal to defend §1983 and wrongful death claims stemming from a police shooting during a reported domestic disturbance. The defendant insurer’s success in excluding the insured city’s expert testimony on the ground that he lacked specialized knowledge, however, was apparently short lived.

The crux of the city’s complaint was that its liability insurer acted in bad faith when it failed to settle with the decedent’s estate within the $1,000,000 policy limits, and that such bad faith was evidenced by the insurer's failure to adequately investigate and evaluate the decedent’s claim, its failure to reasonably consider a settlement recommendation at $600,000, or to pursue settlement negotiations, and its failure to adequately inform the city on the prospects of a jury verdict in excess of the $1,000,000 policy limits. The district court rejected the proffered expert opinion testimony by the city’s insurance claims expert, a person who had about 30 years of experience in claims adjustment and claims handling, on the insurer’s handling of the §1983 and wrongful death claims and its failure to settle the claims and protect the city from a large verdict rendered in excess of the insurer’s liability coverage. Upon excluding this expert evidence, the district court granted the insurer's motion for summary judgment on breach of contract and unfair claims practices claims, and granted the insurer's motion for judgment as a matter of law on the claim of bad faith refusal to defend. The city claimed on appeal that the district court had erred in rejecting its expert's testimony on insurance claims handling.
Lack of Specialized Knowledge Rendering Testimony Unhelpful

The Tenth Circuit upheld the district judge’s finding that the expert’s testimony would not be helpful to the jury, insofar as the jury was capable of determining the bad faith issue on its own, and the expert “lacked specialized knowledge on New Mexico bad faith cases and his experience was with first party, not third party insurance disputes.” Id. at 587. It reasoned that “[t]hough a proffered expert possesses knowledge as to a general field, the expert who lacks specific knowledge does not necessarily assist the jury.” The Court nonetheless found that there was particular evidence that required the case to be submitted to a jury, and remanded for further proceedings, noting that expert testimony along the line that the City proffered below may be produced again with different supporting. That offer of proof should be assessed in light of qualifications then shown and the requirements of Rule 702 and it might then be found proper for admission. We only hold here that the specific ruling on this record, challenged on this appeal, was not an abuse of discretion.

Lack of specialized knowledge proved fatal to an expert’s proposed testimony in Duckworth v. St. Louis Metropolitan Police Department, 2005 WL 2807043 (E.D. Mo. October 27, 2005), where the district court held:

On the issue of whether police departments should have female officers on all shifts in order to properly deal with female suspects, plaintiffs simply rely on Wygert’s experience as a police officer. Plaintiffs do not allege that Wygert has any specialized knowledge relating to psychology, police science, public policy, or any other field that might qualify him to be an expert on this issue. Nor did plaintiffs allege that Wygert used any theory, technique or methodology in coming to his conclusions on this issue. As a result, plaintiffs have failed to demonstrate that his opinion on this issue is admissible.” Id. at *3.

XVII. Developments in Federal and State Courts

This leaves us today with a complex weave of federal and state common law in which the reliability and relevance of expert evidence in governmental litigation are assessed. While the focus of this presentation has been on how Daubert challenges have developed in federal civil litigation, there is a tremendous and growing body of Daubert-related precedent in state court civil litigation that has proceeded on a parallel track, but that is a subject beyond the scope of this discussion, as is the big question whether local government defendants embroiled in civil litigation fare better or worse in federal or state court when Daubert challenges are mounted to exclude or limit expert evidence. See generally Frye/Daubert: A State Reference Guide (D.R.I. Defense Library Series, 2005-07 CD) and D. Bernstein & J. Jackson, The Daubert Trilogy in the States, 44 Jurimetrics J. 351 (Spring 2004).

Expanded Use of Experts

The expanded use of experts in federal courts, and now in state courts, has no parallel in American jurisprudence. From asbestos, tobacco, and employment practices to election challenges, excessive force claims and an alphabet soup of civil rights litigation, Daubert challenges have been won and lost in federal and state suits brought against or in some way involving cities, counties and other local government entities. See A. Lustre, Post-Daubert Standards for Admissibility of Scientific and Other Expert Evidence in State Courts, 90 A.L.R. 5th 454 (2005).
Expansion of Federal Civil Rights Litigation

The procedural mechanism for asserting Daubert challenges can now be evaluated and applied with greater efficacy in light of the vast amount of precedent that has formed the warp and woof of expert evidence. With the 1993 and 2000 amendments to the Federal Rules of Civil Procedure, many federal courts, with state courts not far behind, have developed a more narrowly tailored approach to the gatekeeping function, linking it concretely to the context, type and nature of the cause of action, the particular expert evidence at issue, and the quality and comprehensibility of the scientific, technical, and other specialized knowledge upon which that evidence may be based. The trial advocate’s role should include assisting the trial judge in the exercise of this gatekeeping function, in light of the “considerable leeway” that the judge has in deciding if particular expert testimony is reliable under the specific facts of a case. *Kumho Tire Co. v. Carmichael*, 526 U.S. at 152.

XVIII. Daubert and Statistical Evidence

The Court has also plunged the Daubert oar into an ocean of statistical evidence, from a validation study that demonstrates the effectiveness of a hiring examination for selecting recruits who can succeed in a law enforcement officers training program, to calculations that disprove racial disparities in the hiring public school teachers, data showing the admission rate for women seeking applying to an institution of higher learning, statistics showing the results of a racial preference in medical school admissions, to demographic data relating to public school segregation, racial discrimination in the Postal Service’s promotion of employees.

Regression Analysis in Discrimination Cases

In *Bazemore v. Friday*, 478 U.S. 385 (1986), the Supreme Court established the rule governing admissibility of regression analyses in discrimination cases: While the omission of variables from a regression analysis may render the analysis less probative than it otherwise might be, it can hardly be said, absent some other infirmity, that an analysis which accounts for the major factors must be considered unacceptable as evidence of discrimination. Normally, failure to include variables will affect the analysis' probativeness, not its admissibility. *Id.* at 400 (Brennan, J., conc. in part, joined by all Justices) (internal citations and quotations omitted). The Court qualified this rule by adding that "there may, of course, be some regressions so incomplete as to be inadmissible as irrelevant." *Id.* at 400 n.10. Plaintiff cannot exclude a regression analysis, however, simply by pointing to variables not taken into account. See *Coward v. ADT Sec. Sys., Inc.*, 140 F.3d 271, 274 (D.C. Cir. 1998). In the voting rights cases that followed after the Supreme Court entered the “political thicket” in *Baker v. Carr*, the Court evaluated statistical evidence showing minority voter registration in states with literacy tests, the magnitude of campaign contributions restricted by federal law, the equality of legislative apportionments, the “effectiveness” of votes and the existence, cause, effect and efficacy of racial and political gerrymanders.

Conversely, an expert’s opinion that is not based on statistical studies does not render that opinion inadmissible, provided that the testimony will "assist the trier of fact to understand the evidence" concerning matters outside common experience, and the testimony is based on reasoning or methodology generally accepted within a particular profession or discipline. The role of the trial judge is 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", quoting *Kumho Tire Co.*, 526 U.S. at 152.
Unverified Statistics

We've all heard the old adage "figures don't lie, but liars sure can figure." Some attribute this to Mark Twain, others to an unnamed politician whose beat his opponent despite last-minute polling results that said otherwise. When it comes to statistical evidence, moreover, woe be to the litigant who arms himself with statistics neither he nor his expert bothered to verify.

Statistical Evidence Not True Random Sample

In Chavez v. Illinois State Police, 251 F.2d 612 (7th Cir. 2001), a civil rights action alleging ethnic profiling by Illinois State Police, plaintiffs proffered statistical analyses of traffic stops based on law enforcement databases, census data, and state records of licensed drivers. In recommending summary judgment in favor of defendants on plaintiffs' equal protection claim, the magistrate judge found that the plaintiffs' statistical evidence was deficient because data on ethnicity has not been collected for every motorist stopped, and because such data as do reflect ethnicity do not constitute true random sample. The district court granted summary judgment without evaluating the statistical evidence because statistical evidence would not sustain the plaintiffs' claims even if it was valid. Two years later in the same litigation, while other claims had been pending, the defendants moved to strike plaintiffs' statistical experts under Daubert. The district court denied the motion without prejudice, noting that it was unclear why defendants were raising a Daubert challenge only now. In affirming the summary judgment, the Seventh Circuit held that it was unnecessary to remand the case for consideration of plaintiffs' statistical evidence, because the statistical evidence could not establish a prima facie case, and because plaintiffs' statistical proof was neither relevant nor reliable. The Court concluded:

[Without reliable data on whom [defendant's] officers stop, detain, and search, and without reliable data indicating the population on the highways where motorists are stopped, detained, and searched, we can not find that the statistics prove that the [defendant's] officers' actions had a discriminatory effect on the plaintiffs.

Failure of Statistical Analysis To Control for Significant Variables

District Judge Shira Scheindlin was confronted with just such statistical gibberish in Bonton v. City of New York, 2004 U.S. Dist. LEXIS 22105 (S.D. N.Y. 2004), and the Court, to put it lightly, was not pleased. There the plaintiffs brought a §1983 claim against New York City and its Administration of Child Services (ACS), claiming that their infant twins had wrongfully been placed in foster care as a result of ACS's policy or custom of singling out African-American families for such treatment. Their expert, Dr. Harriet Zellner, was prepared to give expert opinion testimony to support the plaintiffs' contention that ACS discriminates against African-Americans. Zellner had a Ph.D. in economics from Columbia University and was hired to help the plaintiffs prove their Monell claim against the City. Monell v. Dept. of Soc. Servs. of the City of New York, 436 U.S. 658 (1978). In Zellner's report, the expert stated that there were statistically significant disparities in 2000 and 2001 in the rate at which children of African American and white families investigated by ACS were remanded to the custody of ACS and placed in foster care. Her report was based on ACS-supplied data that showed the racial identity of parents investigated by ACS in 2000 and 2001 and the number of children by race remanded to the custody of ACS. In her report, Zellner concluded that 2.7% of the white families investigated by ACS and 6.5% of the African American families investigated by ACS had their children placed in foster care. The plaintiffs' attorney, Ratner, however, "egregiously misstate[d] the data contained in Dr. Zellner's report" and argued that only 9.6% of the white families investigated by ACS had their children placed in
foster care, whereas 90.4% of the African-American families investigated by ACS had their children placed in foster care.

Dr. Zellner's core opinion was that there was a statistically significant disparity in the remand rates for African American and white families investigated by ACS, but she admitted that there were shortcomings in her methodology and analysis that had a bearing on her conclusion, and that she could not control statistically for any existing between-race differences in factors such as family income, parents' employment status, and parents' education, factors that might influence the ACS decision, nor could her analysis control for such variables as the number of times ACS had investigated a family over the last several years. Her analysis further assumed that such differences did not exist or were unimportant to ACS. Further, Dr. Zellner expressed no opinion as to whether African-American children were more likely to be placed in foster care on account of their race. As Judge Scheindlin put it in addressing the plaintiffs' attorneys' characterization of his own expert's evidence:

The question arises whether Mr. Ratner is intentionally trying to deceive the Court or if he simply cannot grasp the findings of his own expert's report. Id. at *4.

In light of the failure of Dr. Zellner's statistical analysis to account for significant explanatory variables and the failure of her statistical analysis to control for any nondiscriminatory variables, the Court was troubled with the data in her report showing that African American children were over twice as likely to be removed from their parents as the result of an ACS investigation as are white children, noting that "[t]his disparity points to a sad state of affairs in New York City, [but] does not say anything about whether ACS discriminates against African Americans." Id. at *11. The Court nonetheless granted a defense motion to preclude the testimony of the plaintiffs' statistical expert on the ground that it would not assist the trier of fact. While the expert conceded has qualifications as an expert in statistics, her methodology was limited and her conclusion that the disparity in remand rates for African Americans and whites could not be attributed to chance would be of no assistance to a jury charged with determining whether it was ACS's policy or custom to place African American children in foster care on account of their race. The Court concluded on the basis of Rule 702 and in the exercise of its gatekeeper function under Daubert that allowing this statistical expert's testimony would invite the jury to engage in impermissible speculation.

XIX. Daubert, Voting Rights/Electoral Litigation

In United States v. Blaine County, 363 F.3d 897 (9th Cir. 2004), an action brought by the United States against a county under section 2 of Voting Rights Act, the United States alleged that the county's at-large election system impermissibly diluted the voting strength of Native American Indians. In order to show racially cohesive voting by Native American Indians in the county, the United States proffered the expert testimony of Dr. Theodore Arrington, who testified over the county's objection that in all fourteen county-wide elections he examined, Native American Indian voters exceeded 67% cohesion. The district court found a Section 2 violation and ruled for the United States, enjoining the county from holding elections under its at-large electoral system. The Ninth Circuit upheld the admissibility of the challenged expert testimony, rejecting the county's argument that the district court did not rule on its objections to experts' testimony. The Ninth Circuit found that the district court did evaluate the reliability of Dr. Arrington's testimony. The Court also rejected the county's argument that Dr. Arrington's testimony was unreliable, because he relied on race-identified registration lists, but the county's own expert testified that such reliance is customary and appropriate, and Dr. Arrington's and the county expert's bivariate ecological regression analysis and homogenous precinct analysis yielded similar results. The Court
found no abuse of discretion in admitting Arrington’s testimony and considered any error in not making the required reliability determination to be harmless, reasoning as follows:

The County challenges Dr. Arrington's use of race-identified registration lists. However, both Dr. Arrington and Dr. Weber, the County's expert, testified that race-identified registration lists are commonly used and acceptable tools for examining racial voting patterns. Indeed, race-identified registration lists are arguably superior to the alternatives, such as the use of census data, because they make no assumptions about registration rates in particular communities. Moreover, the notion that Dr. Arrington's analysis was methodologically flawed is belied by the fact that Dr. Arrington's and Dr. Weber's bivariate ecological regression analysis and homogenous precinct analysis yielded similar results. Finally, Dr. Arrington actually went beyond procedures used in previous section 2 cases and divided his coders into separate Thus, there was no abuse of discretion in admitting Dr. Arrington's testimony and exhibits. We agree that the district court failed to determine the reliability of portions of Dr. Hoxie's testimony and the entirety of Dr. McCool's expert testimony, despite objections by Blaine County. The district court's decision is not reversible, however, if its failure to make the required reliability determination was harmless. Because we agree that the district court failed to expressly determine the reliability of Dr. Hoxie and Dr. McCool's testimony, we do not address the County's alternative argument that their testimony should not have been admitted because it was methodologically flawed. However, we note that the County does not challenge Dr. Hoxie's methodology with respect to his examination of the period 1844-1959. We conclude that the district court's error was harmless because the tainted testimony was not essential to the district court's ultimate finding of vote dilution. The district court's memorandum decision never specifically cites the testimony of Dr. Hoxie or Dr. McCool. At most, the district court relied on this testimony to find a history of official discrimination, the first Senate factor. But Dr. Hoxie's testimony regarding events between 1844 and 1959, which the County does not challenge, provides independent evidence of official discrimination by the State of Montana. In any event, the first Senate factor is not critical. As Gingles explained, "the most important Senate Report factors bearing on § 2 challenges to multimember districts are the 'extent to which minority group members have been elected to public office in the jurisdiction' and the 'extent to which voting in the elections of the state or political subdivision is racially polarized.' " In fact, Gingles expressly stated that other factors, such as the first Senate factor, "are supportive of, but not essential to, a minority voter's claim." Id. Therefore, even if we exclude the tainted testimony, and even if we assume that testimony *916 was critical to the district court's analysis of the first Senate factor, we would not disturb the district court's ultimate finding of vote dilution. Id. at 915-16.

In Shirt v. Hazeltine, 336 F. Supp. 2d 976 (D.S.D. June 29, 2005), the district court held that a state legislative redistricting plan violated Section 2 of the Voting Rights Act of 1965 because the plan diluted Indian voting strength by minimizing the number of districts in which they could select a candidate of their choice. In admitting the expert testimony of the plaintiffs' demographic expert, William Cooper, the district court found that the expert's use of single-race Indian data, while less comprehensive, did not discredit his redistricting maps or his findings, and even though he had not taught at a college, written for a journal and was not a sociologist, political scientist, economist of econometrician, “he is nonetheless credible and qualified as an expert to draw redistricting maps. Neither his testimony nor his report require expertise in these social sciences for purposes of providing reliable testimony
about alternative redistricting plans for South Dakota. He need not be an 
expert in anthropology, Sioux culture and history, or South Dakota history to 
reliably report on redistricting options in South Dakota. He can reliably base 
his analysis and conclusions on his experience in South Dakota and his 
knowledge of redistricting.” Id. at 989-90

Voter Registration Data as Basis for Measuring VAP

Expert opinion testimony as to voting age population was addressed in 
Johnson v. DeSoto Board of County Commissioners, 204 F.3d 1335 (11th Cir. 
2000). The County in a vote dilution action proffered an expert who relied on 
voter registration figures to opine on the county's population increased 
following the 1990 census. The Eleventh Circuit upheld the trial judge's 
ruling that this expert opinion testimony was admissible. It rejected the 
plaintiffs' argument that voter registration data are inherently unreliable as a 
measure of voting age population and cannot be used to contradict census 
figures, reasoning that there is no per se rule against use of voter registration 
data, and that the evidence derived through statistically valid sampling 
techniques has previously been held admissible.

Voting Machine Down Time

Malfunctioning electronic voting machines and expert testimony about 
down-time were the subject of Montgomery County v. Microvote Corp., 320 
F.3d 440 (3rd Cir. 2003). The county recovered monetary damages in a suit 
against the seller/principal and its surety based on malfunctions of electronic 
voting machines purchased by county. At trial the defendants proffered the 
videotape deposition testimony of an expert, Naegele, who was admittedly 
qualified to testify that the voting machines met Federal Election Commission 
standards, but relied in part on a "reverse guestimate" of the machines' down 
time set forth in a document prepared by the defendant seller's sales director. 
The expert did not know what this down-time document was, who created it or 
how it was created, nor did he measure actual election use data. The trial 
court's exclusion of this expert evidence was upheld by the Third Circuit, 
which concluded that the data underlying the expert’s opinion was not based 
on sound data and was unreliable:

While the District Court did not question Naegele's qualifications as an 
expert to offer such testimony, the testimony of a witness, who is well-
qualified by experience, still may be barred if it is not based on sound 
data. …The trial judge, after viewing the videotape deposition, held 
that the videotape was inadmissible because it was unreliable, noting 
that "I'm a little concerned about some of the things that were shown to 
him he didn't seem to know where they were from or what the source 
of them were. That, I find disturbing." In his deposition, Naegele 
indicates that he relied on a document prepared by Microvote's 
National Sales Director, Gary Greenhalgh, in which Greenhalgh, who 
was not present during the April 1996 elections, made a "reverse" 
"guestimate" about the amount of time that the machines were down. 
Greenhalgh did not base his determination on primary data. Naegele 
admitted that he did not know what the document was, who created it, 
or how it was created. Naegele also relied on other documents, some of 
which apparently were derived from the Greenhalgh document. Again, 
Naegele could not identify the source or basis of some of these 
documents, and Naegele admitted that he did not measure actual 
election use data to determine how long the machines were down. 
While Naegele testified that he relied on audit trail tapes, these were a 
sampling of tapes that were selected by an attorney for Carson. … 
Naegele was not subjected to cross-examination at his deposition 
because plaintiff's attorney was not present. Under these 
circumstances, we conclude that the District Court did not abuse its 
discretion in excluding Naegele's testimony because the court
reasonably concluded that the data underlying Naegele's opinion was so unreliable that no reasonable expert could base an opinion on it. Id. at 448-49.

XX. Daubert and Antitrust Litigation

In antitrust litigation, such issues as relevant market, predatory pricing, the effect of anticompetitive conduct, rule of reason vs. per se rule, antitrust injury and damages, cross-elasticity, and market structure are at once factually complex and intrinsically economic in nature, not to mention beyond the scope of most litigation work performed by the vast majority of local government counsel and, now and then, a few judges. See NCAA v. Bd. of Regents of Univ. of Okla., 468 U.S. 85, 100 n.21 (1984) ("Judicial inexperience with a particular arrangement counsels against extending the reach of per se rules."); Arizona v. Maricopa County Med. Soc'y, 457 U.S. 332, 344 (1982) (suggesting that per se illegality is appropriate "once experience with a particular kind of restraint enables the Court to predict with confidence that the rule of reason will condemn it").

Antitrust Law as Branch of Applied Economics

Litigation in the antitrust field is often more dependent upon expert testimony than civil suits in other fields, and it draws so heavily on economic ideas that one appellate judge has suggested that antitrust law is "a branch of applied economics." Recent scholarly commentary has centered on the effect of judicially imposed constraints on reliable and relevant expert testimony and judicial limitations on the scope of admissible expert testimony through Daubert's "methodological strictures" in antitrust litigation. J. Lopatka and W. Page, Economic Authority and the Limits of Expertise in Antitrust Cases, 90 Cornell L. Rev. 617, 619-20 (2005) provides a good discussion of the interplay between economic theory and expert testimony in antitrust litigation:

"[A] jury's evaluation of conflicting economic opinions rarely decides cases because federal judges' choices limit the scope and force of expert testimony. Some of these choices occur in the application of the methodological strictures of the Daubert trilogy of Supreme Court decisions; others occur in evaluating the sufficiency of expert evidence to support a jury verdict. …[T]hese judicial choices rest on economic authority, a body of authoritative economic knowledge adopted by courts -- directly or indirectly -- from the scholarly literature. Although some have suggested that interdisciplinary approaches have made legal scholarship generally less useful to courts, the use of economics in modern antitrust scholarship has had the opposite effect. Economic authority largely drawn from that scholarship now provides the conceptual basis for many judicial decisions in antitrust cases, including decisions defining the role of expert testimony."). Expert testimony in antitrust litigation is thus not only essential to establish critical elements of proof, but can be used in combination with scholarly literature to guide judicial choices concerning "economic authority," which is defined as "a body of authoritative economic knowledge adopted by courts -- directly or indirectly -- from the scholarly literature." … “Economic authority largely drawn from that scholarship now provides the conceptual basis for many judicial decisions in antitrust cases, including decisions defining the role of expert testimony.” . Such evidence must be filtered through multiple judicially monitored screens in the antitrust context: "the scrutiny of experts' qualifications and of their testimony's relevance, reliability, and sufficiency."

Id. at 622. See generally A. Gavil, After Daubert: Discerning the Increasingly Fine Line Between the Admissibility and Sufficiency of Expert Testimony in Antitrust Litigation, 65 Antitrust L.J. 663, 663, 669-88 (1997)(providing
examples of how Daubert affects the presentation and acceptance of expert testimony in antitrust cases).

As grounds for judicial decisionmaking in antitrust litigation, economic authority and expert testimony nonetheless rest on different conceptual foundations. Daubert's inquiry into the reliability of expert testimony reflects a positivist view that scientific and technical knowledge is objectively true and that, consequently, the statements of experts should be testable by recognized methods. In contrast, judicial adoption of economic authority implicitly acknowledges a sociological dimension to the acceptance of theory.

J. Lopatka and W. Page, supra at 621.

Lack of Qualifications to Testify About Economic Theory

An example of the role of Daubert in antitrust analysis is found in City of Tuscaloosa v. Harcross Chems., Inc., 877 F. Supp. 2d 1504, 1509 (N.D. Ala. 1995), where the trial judge noted that experts had "characterized the chlorine industry as an oligopoly selling a homogenous product to an inelastic market on an ongoing basis." Expert testimony of a CPA in Tuscaloosa was also held inadmissible where the witness was not shown to be qualified to testify regarding economic theory.

The Eleventh Circuit in City of Tuscaloosa, reversing some of the trial judge’s exclusions and affirming others, held that it was error for the trial judge to require the expert, as a condition of admissibility under Daubert, to "show a successful conspiracy." It reasoned that opinions of experts for plaintiffs in antitrust cases "need not prove the plaintiffs' case by themselves; they must merely constitute one piece of the puzzle that the plaintiffs endeavor to assemble before the jury."

The Court noted that the Federal Rules of Evidence do permit experts to testify to an ultimate issue, provided the testimony will assist the jury, but in this case, the legal definition of agreement differed from economic concepts of collusion or cooperation, hence the issue was outside of the expert's domain.

Probable Anticompetitive Effects

In Anaheim v. FERC, 941 F. 2d 1234, 1250 (D.C.Cir. 1991), the D.C. Circuit reversed and remanded the FERC's findings on anticompetitive effect and remanded, in light of testimony given by a public utility's expert, an industrial organization and a public utility economist, who testified concerning the probable effects of the eleven-and-a-half months of price discrimination on competition to attract and retain large industrial, or A-8, customers, and on fringe area competition for A-8 customers located near the borders of competing service areas," concluding that price discrimination of the duration and magnitude at issue in this case "would be unlikely to affect industrial customers' locational decisions."

Theoretical Model’s Fit with Particular Facts of Case

As was pointed out earlier with respect to the Daubert “fit” test, an expert's proffered testimony, including any theoretical models he seeks to use to illustrate his opinion or provide an articulate basis for it, must fit the facts of the particular case in which it is offered. See generally D. Kaye, The

For example, in *Concord Board Corp. v. Brunswick Corp.*, 207 F. 3d 1039 (8th Cir. 2000), an antitrust case against a stern drive engine manufacturer based on a claim that the defendant’s discount programs constituted *de facto* exclusive dealing, the Eighth Circuit held that the testimony of a Stanford Economics professor based on an economic model should have been excluded because the testimony did not adequately fit the facts of the case. The economic model was used by the expert to construct a hypothetical market, but it ignored inconvenient evidence and was not based on the economic reality of the relevant stern drive engine market, and also failed to account for market events unrelated to any anticompetitive conduct.

In antitrust litigation, reliability is different from relevance, in that *Daubert*’s inquiry into methodology serves a different purpose from the requirement that expert testimony be relevant to the issues.

An economic expert may propose to offer methodologically sound testimony unexceptionable among economists, yet excluded as irrelevant or held insufficient to support a jury verdict, if the fact is not in issue under the appropriate legal standard. Reliability is nevertheless related to relevance because antitrust law imposes significant constraints on methodology. The economic authority underlying antitrust rules may have methodological implications that displace or overlap with professional criteria of reliability. Most disputes over the reliability of economic testimony in antitrust cases turn on the requirements that the testimony be "based upon sufficient facts or data" and that it rest upon "reliable principles and methods." Courts say that the expert must have "applied the principles and methods reliably to the facts of the case," and that the testimony must "incorporate all aspects of the economic reality of the ... market," including "inconvenient" evidence. Moreover, under *Joiner*, even if the methodology is sound, the testimony may still be excluded if "there is simply too great an analytical gap between the data and the opinion proffered."


XXI. *Daubert* and Employment Discrimination

In an employment discrimination suit based on alleged disparate treatment, racial harassment and retaliation in violation of Title VII and violation of the equal protection clause, *Perez v. City of Batavia*, 2004 U.S. Dist. LEXIS 24695 (E.D. Ill. 2004), plaintiffs’ expert, Kennedy, compiled statistics showing that the City’s police department issued tickets to African-American and Hispanic motorists more frequently that might “be expected” in light of the expert’s calculation of the African-American and Hispanic population in the area. Addressing the City’s motion to strike the expert’s affidavit setting forth her statistical analysis, the district court concluded that the statistics proffered through this expert were unreliable due to four methodological flaws.

The Perez decision provides an excellent step-by-step critique of a statistical expert’s methodology, the propriety of methodological choices, standard deviation and statistical significance of data. The decision states:
The Court finds that the statistics plaintiffs proffer via the Kennedy declaration are unreliable and, hence, inadmissible due to at least four major methodological flaws.

[1] The first major flaw is that Kennedy changed individuals' race from white or no race to Hispanic, based on whether the individual has a Hispanic surname and/or a Hispanic first name. Nothing in Kennedy's declaration suggests that this is an appropriate methodological choice or that this is something experts in her field generally do. Nothing in Kennedy's declaration suggests that the officer who issued each ticket was not in the best position to determine the ticket recipient's race. Although the list of Hispanic surnames Kennedy used contained surnames that were 75% likely to indicate one was Hispanic, Kennedy assumed the individuals with such names were Hispanic 100% of the time. With respect to Hispanic first names, Kennedy makes no showing as to how she determined whether a first name was Hispanic and provides no evidence that her assessments have any sound basis.

[2] The second major flaw in Kennedy's methodology is that she did not apply it consistently. Kennedy changed to Hispanic the race of individuals with surnames not on the list of "Heavily Hispanic Surnames."

[3] The third major flaw in Kennedy's analysis is that the data she used to determine the 'expected rate' of tickets for Hispanics and African-Americans bears no relation to what one would actually expect. To determine the expected rate of tickets, one needs to know the number of Hispanic and/or African-American drivers on the roads patrolled by Batavia P.O., not the number of African-Americans and/or Hispanics who live in Kane and DuPage counties. …Kennedy has used as a benchmark a number which sheds no light on the number of Hispanic or African-American drivers Batavia police officers encounter. Because Kennedy's statistical analysis relied on the wrong data, the analysis is unreliable as a matter of law.

[4] The final major flaw in Kennedy's analysis is that she provides no information to help a trier of fact assess the likelihood that the numbers are a result of random chance, rather than discrimination. Usually, statisticians calculate the standard deviation from the norm to determine the likelihood that race played no role in the decision. ... Generally, statisticians believe that two standard deviations is enough to show that the result is unlikely (less than a 5% probability) to be the result of chance, i.e., that the result is "statistically significant." … [T]he fact that Kennedy did not bother to perform the standard deviation calculation and, hence, the fact--finder has no basis on which to evaluate the statistical significance of the results is one more reason for the Court to conclude that the statistics are unreliable. Id at *24 – 27 (emphasis added and internal citations omitted).

Methodological Flaws Leading to Unreliability

The Katt case is an excellent example of the interplay between Rules 702 and 403, and the dynamic of Daubert challenges made during trial and renewed post-trial. Expert testimony was the central focus of a claim against the City of New York and a lieutenant brought by a former female civilian police administrative aide who alleged that she was subjected to sexual harassment and a sexually hostile work environment in Katt v. City of New York, 151 F. Supp. 2d 313 (S.D.N.Y. 2001). In upholding a $400,000.00 compensatory damage award, the court rejected post-trial challenges to the testimony of an expert in the culture of police departments in general and the NYPD in particular, based on the expert’s distinctive combination of “insider” experience and academic training. The expert was a veteran police officer and
trained sociologist with three academic degrees and a specialty observing police organizations, had published two books on police culture in peer-reviewed university presses, held a Ph.D. in Sociology and Criminology from NYU and served as a decorated member of the NYPD for 23 years in five different precincts in capacities ranging from patrol officer, detective, lieutenant and commanding officer. He was an associate professor of sociology and criminal justice at Manhattan College, and in his capacity as an advisor/mentor to police officers seeking college degrees from Empire State College had interviewed hundreds of police officers about their experiences working in the NYPD and other paramilitary organizations.

While the expert had been qualified in the Eastern District of New York on the subject of retaliation against police officers who bring discrimination complaints against their superiors or colleagues, the defendants elected to “quibble with” this expert’s training and alleged shortcomings, pointing out that the expert had also been found unqualified in several cases involving how the police department assigns newly commissioned officers to their first departmental precinct and how the police department trained officers to handle crime scene investigations. These cases concerned subjects that were outside the expert’s academic specialty, whereas in this case his testimony concerned the culture and practices of police organizations by which officers and civilian employees might fear retributions for reporting official wrongdoing.

The district court found that the expert’s lack of expertise in those specific areas of police practice had no bearing on his experience and knowledge of general police culture and practices by which police employees might fear retaliation for reporting official wrongdoing. It concluded that the expert’s credentials, academic background, knowledge and personal experience sufficed to qualify him as an expert witness. In keeping with its gatekeeping obligations under Rule 702, the district court adhered to its trial ruling that the data and methodology underlying his testimony were academically sound and within the mainstream of criminological research. It noted that the defendants’ tactical choices to limit their cross-examination of the expert and not to call any witnesses to refute his testimony “speak volumes both about the essential accuracy of the core of his testimony and about the unlikelihood of any genuine prejudice from his occasional excesses of enthusiasm. Defendants evidently concluded that they could leave his testimony, for the most part, well enough alone.” Id. at 365. The district court also rejected the defense challenge under Rule 403, based on an argument that the defendants were unfairly prejudiced by testimony that potentially inflamed the jury against the NYPD by depicting the department as riddled with misconduct, retaliation and offensive behavior. Rejecting the 403 claim of prejudice, the district court concluded:

Any potential for prejudice from the challenged testimony, in short, stems from its tendency to demonstrate that there are bad cops, and that bad cops sometimes do bad things to fellow officers who report their misconduct. But this should be no surprise to reasonable jurors residing in this district. The same periodic official investigations of police misconduct and cover-ups on which [the expert] relied in forming his conclusions are well known to the residents of the New York metropolitan area, who accordingly would be neither surprised nor inflamed by those conclusions.

Nor should reasonable jurors, particularly when specifically instructed on the subject, have had any difficulty separating the existence of such misbehavior from an assessment of whether the evidence shows that the particular officer whose conduct they were to assess in this case engaged in sexual harassment that plaintiff claimed she suffered. The evidence in question was clearly presented to the jury as relevant only to the reasonableness of her fear that she would suffer retributions
for reporting any harassment that might have occurred. Thus, it is unlikely that [the expert’s] testimony, even taken in its most prejudicial light, could have caused the jury to base its decision on something other than the established propositions in the case. Id. at 361 (internal quotations and citations omitted).

Lack of Particular Expertise to Assess Racial Motivation

In Bazile v. City of New York, 2003 U.S. App. LEXIS 8439 (2d Cir. 2003)(unpublished), a hostile work environment/race discrimination claim brought against NYPD by a member of the department, the plaintiff while in plain clothes and acting as a private security guard had a “pit bull incident” in which he shot his service revolver eleven times at a pit bull that approached him in an apartment building lobby. The district court excluded the expert testimony of the plaintiff’s proposed expert on the ground that he lacked experience in conducting internal disciplinary investigations such as the one that led to this lawsuit. The Second Circuit affirmed in an unpublished opinion, reasoning that it was not enough that the expert has reviewed the handling and disposition of “personnel type investigations,” and that even if such experience was relevant to NYPD disciplinary proceedings, “it does not establish that [the expert] had any particular expertise that would qualify him to assess whether a discriminatory animus motivated the NYPD, that he relied upon any theory related to discriminatory motivations, or that there are any standards which control the operation of his opinions.” (internal quotation marks and citations omitted).

Regression Analysis Omitting Particular Variables

In Cullen v. Ind. Univ. Bd. of Trustees, 338 F.3d 693 (7th Cir. 2003), a faculty member sought to support her claim of salary discrimination by proffering a regression analysis performed by her expert, an economics professor, who found statistically significant gender differences. The expert found that the faculty member's salary was more than one standard deviation below its predicted value. He could not rule out discrimination as the reason. The university contended that the faculty member's lower salary could be explained by nondiscriminatory factors. The trial judge admitted the expert’s regression study but granted summary judgment in favor of the university. Affirming the admissibility of this expert evidence, the Seventh Circuit reasoned that while the university sought to exclude the expert's regression study as inadmissible under Daubert, because factors like productivity are difficult to quantify, the omission of particular variables in regression analysis ordinarily goes to weight, not admissibility. In this case, however, the Seventh Circuit concluded that the regression study was insufficient to establish a prima facie case of salary discrimination based on gender.

Relying on Rule 701, the trial court admitted lay opinion testimony as to racial animus in Hester v. BIC Corp., 225 F. 3d 178, 184 (2d Cir. 2000), a employment discrimination action against an employer based on alleged racial discrimination. The Second Circuit reversed, holding that the witness, in giving the lay opinion that the supervisor’s harsh managerial style was motivated by racial animus, was merely speculating that the supervisor’s motives were not race-neutral.

XXII. Expert Testimony in EEOC Litigation

As a subset of statistical evidence subject to scrutiny under the Daubert trilogy, expert testimony used by both the EEOC and private litigants in employment discrimination cases can address issues ranging from disparate impact, pattern and practice, and disability discrimination, to the validity of comparison groups and statistically significant results in a claim of systemic sexual harassment. Rule 702 has been applied in a number of cases to exclude expert testimony, as, for example, in EEOC v. Joe’s Stone Crab, 220 F. 3d
52, 1263, 1275-77 (11th Cir. 2000), where the EEOC’s own statistical expert was excluded on the ground that the labor pool he identified had not been adjusted to encompass only qualified applicants.

**Statistical Testimony Rejected for Arbitrariness and Incomplete Assessment**

Similarly, in *EEOC v. Texas Instruments*, 100 F. 3d 1173, 1185 (5th Cir. 1996), the EEOC attempted to rebut a proffered nondiscriminatory reason given by the employer for terminating an employee, through evidence presented by its statistical expert. In holding that this expert evidence should be rejected, the Fifth Circuit found that the EEOC’s expert had created an arbitrary age cutoff and had neglected to consider the specific duties or talents of terminated employees as compared to retained employees.

**Statistical Survey Rejected for Lack of Reliability**

In *EEOC v. Dial Corp.*, 2002 WL 31061088 (N.D. Ill. 2002), the district court evaluated conclusions from a sexual harassment study to the effect that the defendant’s plant contained a “high level of hostile and degrading sexualized behavior,” noting that this suggested that other locations were compared when in fact “no such comparison was made in the report.” *Id.* at *6-7. The EEOC expert in *Dial* had conducted a survey of women at the plant in question, and based on the responses of 129 employees concluded that the plant was “historically permeated” with such hostile and degrading behavior condoned by a “pervasive culture of permissiveness.” *Id.* at *1. The district judge excluded portions of the expert’s report that were deemed deficient under Rule 702, giving the following as its reasons:

1. questions and responses in the survey did not establish that the responding worker had been subjected to offensive conduct.
2. the expert’s conclusion that there was a high level of harassment at the plant was unreliable since no comparative studies were made to show that this plant’s scores were high in an objective sense.
3. employees were impermissibly biased against the employer in that nearly all of the persons surveyed had a stake in the litigation and the questions were worded in such a way as to encourage answers adverse to the employer.
4. the sample size and relevant time frames used in the survey were faulty. *Id.* at *5, 6, 9-11.


Generally, in EEOC litigation, the failure of an expert to include variables will affect the probative value of an expert’s analysis, but not its admissibility; however, when an expert conducts a regression analysis and fails to incorporate major independent variables, the analysis may be excluded as irrelevant. In *Bickerstaff v. Vassar College*, 196 F. 3d 435, 448-49 (2d Cir. 1999), the Second Circuit affirmed the district court’s exclusion of a Title VII plaintiff’s expert’s multiple regression analysis, which controlled for experience, rank, productivity, and discipline, to conclude that a salary variance was attributable to discrimination, but did not control for such nondiscriminatory causes as teaching and service. The court held that the analysis was “so incomplete as to be inadmissible as irrelevant.”
In *Lipsett v. University of Puerto Rico*, 740 F. Supp. 921, 925 (D.P.R. 1990), the district court excluded expert testimony about the existence of a hostile work environment, holding that “this subject does not lend itself to expert testimony because it deals with common occurrences that the jurors have knowledge of through their experiences in everyday life and their attitudes towards sexual matters.” As the First Circuit Court of Appeals noted in *Noviello v. City of Boston*, 398 F. 3d. 76 (1st Cir. 2005), in holding that a parking enforcement officer’s retaliatory harassment claim was supported by sufficient evidence to survive summary judgment, “no pat formula exists for determining with certainty whether the sum of harassment workplace incidents rises to the level of an actionable hostile work environment... . Such a determination requires the trier of fact to assess the matter on a case-by-case basis, weighing the totality of the circumstances.... . Our function is one of screening, that is, to determine whether, on particular facts, a reasonable jury could reach such a conclusion.” Id. at 94.

In *Skidmore v. Precision Printing and Packaging, Inc.*, 188 F. 3d. 606 (5th Cir. 1999), a Title VII action based on workplace sexual harassment and a claim for intentional infliction of emotional distress under state law, the employer on appeal argued that the district court had erroneously admitted expert testimony of a psychiatrist who had evaluated the plaintiff, and who testified to his diagnosis that the plaintiff suffered from post-traumatic stress disorder and depression brought on by the harassing conduct of the plaintiff’s co-worker. Id. at 617. The Fifth Circuit in a fact-specific inquiry concluded that the district court did not deviate from the standard for admission of expert testimony under *Daubert* and *Kumho*, noting that the responsibility of the district court “is 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.” Id. at 618. The Fifth Circuit concluded that the plaintiff’s expert:

Testified to his experience, to the criteria by which he diagnosed Skidmore, and to standard methods of diagnosis in his field. Absent any indication that Dr. House’s testimony amounted to the sort of “junk science” *Daubert* blocks, we see no abuse of discretion in the district court’s admitting the testimony. Id. at 618.

The employer in *Skidmore* further challenged the plaintiff’s expert on the basis that he had opined about the plaintiff’s credibility, but the Fifth Circuit disagreed, noting that the expert in no way testified that the plaintiff was undoubtedly telling the truth, but “instead, he merely opined that her symptoms and recollections appear genuine and that he felt he had not been “duped” by her. We see no abuse of discretion in the district court allowing a psychiatrist to testify that a plaintiff seems genuinely distressed to him.” Id. at 618. Finally, the employer argued that the plaintiff’s own testimony that she began having nightmares long after the alleged harassment ended contradicted the facts upon which her expert relied, and thus her expert’s testimony was not based on reliable data and should have been excluded. The Fifth Circuit disagreed, noting that under Rule 703, the facts in the particular case upon which an expert bases an opinion or inference “may be those perceived by... the expert at or before the hearing,” and that an expert may be required to disclose the underlying facts upon which he relied pursuant to Rule 705. The Fifth Circuit concluded: “Dr. House did just that. The jury was then free to credit or not to credit Dr. House’s testimony and diagnosis.” Id. See generally *Perez v. City of Batavia*, 2004 U.S. Dist. LEXIS 24695 (E.D. Ill. 2004) (granting defense motion to strike declaration of employee of plaintiffs’ counsel in Title VII action alleging disparate treatment and racial harassment, court noting that the witness had not been qualified as an expert but purported
to testify that she had compiled statistics showing that the defendant police department issued tickets to African American and Hispanic motorists more frequently than might be expected, based on her calculation of the African American and Hispanic population in the area; court concluded that the statistics proffered through this witness were unreliable and inadmissible due to major methodological flaws, and in this case the plaintiff had failed to show that the witness was qualified as an expert by knowledge, skill, experience, training or education, and, accordingly, was a lay witness who would not be allowed to present opinions based on scientific, technical or specialized knowledge, particularly in light of the fact that no information was provided about the witness’ knowledge, skill, experience, training or education from which the court could determine that she qualified as an expert. *Id.* at *26-28.

XXIII. Daubert and Medical Evidence

The Supreme Court has considered medical evidence bearing on physiological and psychological qualifications for employment of flight engineers over age sixty, social psychological testimony identifying sex stereotypes in evaluations for admission to an accounting firm, expert testimony on whether creationism is a science that can be taught in public schools without violating the First Amendment’s Establishment Clause, medical and scientific evidence relating to involuntary administration of antipsychotic drugs to prisoners, withholding of artificial means to preserve the life of a terminally ill individual, the propriety of excluding discussion of abortion during government-sponsored family planning counseling, and diagnosis and treatment of mentally retarded persons for purposes of a due process challenge to commitment procedures. See G. Beggs, Novel Expert Evidence in Federal Civil Rights Litigation, 45 Am. U. Rev. 2, 3-4 (October 1995).

Causation Analysis

Causation analysis is a particularly tricky area for medical doctors. Some say it goes back to the difference between inductive and deductive reasoning, one lying at the heart of medical diagnosis and the other firmly in the realm of methodical scientific inquiry. In *Wynacht v. Backman Instruments, Inc.*, 113 F. Supp. 2d 1205, 1208-09 (E.D. Tenn. 2000), the district court summed it up this way:

The ability to diagnose medical conditions is not remotely the same, however, as the ability to deduce, delineate, and describe, in a scientifically reliable manner, the causes of those medical conditions.

Failure to Account for Alternative Explanations

In *Munafo v. Metropolitan Transportation Authority*, 2003 U.S. Dist. LEXIS 13495 (E.D.N.Y. 2003), a wrongful discharge action was brought by a maintenance employee against his employer based on alleged retaliation in violation of his First Amendment right of free speech and free association, arising from the employee’s reporting of perceived safety problems, unsafe practices and conditions. The employee sought to support his claim for damages attributed to clinical depression by the expert testimony of a psychopharmacologist who was prepared to testify that the employee had suffered as a result of his employer’s treatment of him. The employer challenged this expert testimony under *Daubert* and sought to exclude the expert’s testimony, notes and reports pertaining to his opinion as to the cause of the employee’s depression. The district court precluded the expert from testifying as to the cause of the employee’s depression on the ground that he had not accounted for obvious alternative explanations, stating:

[The expert’s] failure to perform a thorough and meaningful differential diagnosis is particularly troubling considering the serious
alternative factors raised by the defendants. [The expert] could give no satisfactory reason for discounting as contributing causes: his mother’s murder; his father’s diagnosis of cancer; possible hereditary or genetic mental illness; his divorce and the fact that he faced the stresses of single parenthood; or the fact that his girlfriend recently left him. In lieu of any conscientious attempt to rule out these alternative factors, [the expert’s] causation determination barely rises above mere speculation and cannot meet the reliability standards of expert testimony under Daubert. Id. at *58-59.

The district court in Munafò reasoned that the lack of a meaningful differential diagnosis was compounded by the fact that the expert’s causation analysis did not exhibit the rigorous application of scientific principles required by Daubert. The expert, according to the court, was concerned primarily with identifying and treating the employee’s condition, not determining its underlying cause. The expert was thus precluded from submitting evidence of causation, although he was allowed to testify about the facts of treatment and why the employee sought help, what medications he prescribed and what diagnoses he made.

Reliability of Expert Testimony on Partial-Birth Abortions

The lower courts have struggled with the admissibility of medical evidence in the context of partial-birth abortions. Expert testimony of a pediatrician was allowed in order to show that a fetus could experience pain during a partial-birth abortion in National Abortion Federation v. Ashcroft, 2004 U.S. Dist. LEXIS 4588 (S.D.N.Y. 2004). In finding that the proffered testimony of the pediatrician on fetal pain should be admitted, the district court in this nonjury trial conducted a Daubert-based reliability analysis and found that the expert opinion of Dr. Kanwaljeet S. Anand, who specialized in the care of critically ill newborns and children, was both relevant and reliable and therefore admissible under Rule 702 based on the following: (1) his opinion was sufficiently reliable, in that it was based on his extensive experience and research based on anatomical, functional, physiological and behavioral indicators, (2) his opinion was the product of over 20 years of work in this field and not prepared solely for this case, and (3) his work in this field had been published in reputable scientific journals and publications, including many peer-reviewed journals. Id. at *7-8. The district court concluded that it was appropriate to hear the expert’s testimony in a nonjury trial since the court could give it such weight as it deserved. The district court also overruled a Rule 403 objection to this expert testimony, holding that it would assist the court in assessing the reasonableness of Congress’s factual findings that partial birth abortion was a “brutal and inhumane procedure” and that during the procedure the child would “fully experience the pain associated with piercing his or her skull and sucking out his or her brain,” in that the probative value of this testimony was not outweighed by the danger of unfair prejudice.

Expert as Advocate for a Cause

A number of courts have held that where an expert becomes an advocate for a cause, she "departs from the ranks of an objective expert witness;" such expert's testimony grounded on such a lack of objectivity should be excluded as unfairly prejudicial and misleading. See, e.g., Conde v. Velsicol Chemical Corp., 804 F. Supp. 972, 984 (S.D. Ohio 1992);Viterbo v. Dow Chemical Co., 646 F. Supp. 1420, 1425-26 (E.D. Tex. 1986); Johnston v. United States, 597 F. Supp. 374 (D. Kan. 1984), aff’d, 826 F.2d 420 (5th Cir. 1987).

Expert’s Lack of Objectivity

In the context of such a hot-button issue as abortion, one would expect that expert testimony regarding the viability of a fetus might be subject to
challenge for lack of objectivity if a showing could be made that the erstwhile expert was in fact a leader of the right-to-life movement and an ardent supporter of anti-abortion protests. Precisely such a challenge was made and sustained by the district court and upheld by the Sixth Circuit in a pre-Daubert case, In re Air Crash Disaster at Detroit Metro Airport, 737 F. Supp. 427, 430 (E.D. Mich. 1989), aff'd without opinion, 917 F. 2d 24 (6th Cir. 1990), where the president of a national "right to life" organization was precluded from providing expert testimony as to when a fetus becomes viable because the witness could not be considered to be objective. This decision turned in part on the fact that the expert had preconceived notions before the litigation commenced.

Deferece to Rulings on Reliability and Generally Accepted Methodology

In United States v. Brown, No. 03-15413 (11th Cir. July 8, 2005), defendants sold 1,4-butanediol over the internet, a substance chemically analogous to the date rape drug known as gamma hydroxybutyric acid. The issue before the trial court was whether the substance was so similar that the defendants could be held criminally liable for selling a controlled substance. The government proffered the expert testimony of a forensic drug chemist from the DEA and a biochemist from NIH, both of whom gave expert opinion testimony that the drugs were closely similar, based on visual representations of their structure and since both are metabolized in similar fashion. Defendants proffered the expert testimony of a Ph.D. in plant pathology who worked as a freelance consultant in chemistry, and opined in this case that the chemical structures of the two drugs were dissimilar based on "Tanimoto coefficient" method, which he claimed permitted quantitative measurement of molecular similarities. The trial judge admitted the expert testimony from the government's witnesses and excluded the testimony from the defendants freelance consultant, following which the defendants were convicted and appealed. The Eleventh Circuit upheld the trial judge's rulings on the expert evidence, noting that appellate courts are appropriately deferential to evidentiary rulings by trial courts, and here the government's experts could cite no peer-reviewed literature supporting their method, which was concededly intuitive. The Eleventh Circuit nonetheless concluded that the trial judge permissibly credited their testimony that their method was generally accepted. Likewise, according to the Eleventh Circuit, the trial judge acted within its discretion in finding the defendant's expert insufficiently qualified in view of his limited experience with chemistry work and controlled substances. Finally, the Court held that even if the trial judge court erred in finding the defense expert unqualified, it permissibly concluded that the "Tanimoto coefficient" method was of dubious reliability and was unreliably applied.

XXIV. Suicide, Positional Asphyxia and Law Enforcement Liability

In Estate of Boncher v. Brown County, 272 F.3d 484 (7th Cir. 2001), a jail suicide resulted in a § 1983 wrongful death action against the county. The plaintiff proffered expert testimony from a criminologist who opined that the county jail's five suicides within five years was an unusually high number. The Seventh Circuit held that it was error for the trial judge to admit the criminologist's testimony, holding that it "was useless and should have been excluded under the Daubert standard." It reasoned that the relevant question was not the number of suicides, but the suicide rate, compared with the background rate among persons residing in area who were not incarcerated. The Seventh Circuit also noted that the plaintiff's expert criminologist should have accounted for normal variance, and that it would not be sound to condemn jail administrators for suicide rates within one or two standard deviations from suicide rates at other jails. Every statistical distribution has upper tail, but jails unlucky enough to be in upper tail for inmate suicides should not automatically be subject to liability.
In Christiansen v. City of Tulsa, 332 F. 3d 1270 (10th Cir. 2003), the district court excluded the summary judgment affidavit of a suicide victim’s psychiatrist who sought to give an expert opinion that police officials had acted recklessly during a police standoff that preceded the victim’s infliction of his own fatal gunshot wound, when they cut the victim off from the psychiatrist and the victim’s mother. The court reasoned that the expert’s opinions as to what might have happened during the police standoff if the psychiatrist had been allowed to intervene were “pure speculation.” Id. at 1283. The Tenth Circuit affirmed the district court’s exclusion of this expert evidence and its subsequent granting of the city’s motion for summary judgment, holding that the district court did not abuse its discretion in so ruling, noting that the expert evidence in any event lack probative value. The record showed that during the police standoff, the officers asked the suicide victim whether he wanted to see his psychiatrist, and the suicide victim never responded to those inquiries, and, therefore, “insofar as [the psychiatrist] did not convey this information to defendants at the time of the events in question, it has little, if any, probative value.” Id.

In Cook v. Sheriff of Monroe County, 402 F. 3d. 1092 (11th Cir. 2005), the Eleventh Circuit affirmed the district court’s exclusion of proffered testimony of a suicide expert who was prepared to testify on behalf of the estate of a pretrial detainee who had committed suicide while incarcerated in the county jail. The district court also declined to conduct a Daubert hearing. In affirming, the Eleventh Circuit held that neither Rule 702 nor Daubert required the district court to admit expert opinion evidence connected to existing data only through the “ipse dixit” of the plaintiff’s expert, and reasoned that in this case there was “simply too great of an analytical gap between the data and the opinion offered,” Id. at 1111. The Eleventh Circuit further affirmed the district court’s action in declining to hold a Daubert hearing, noting that the issue in this case was not a complicated one, but the proffered testimony of the suicide expert involved an uncomplicated matter, and thus the district court’s refusal to hold a Daubert hearing was not an abuse of its discretion. Id. at 1111.

Positional Asphyxia

In Watkins v. New Castle County, 2005 WL 1491520 (D. Del. 2005), a civil rights action was brought against a county, town and individual police officers after a drug-intoxicated arrestee died in the course of an arrest, allegedly as a result of positional asphyxia while in a state of excited delirium. The defendants sought to exclude the testimony of plaintiffs’ expert witness on the basis that he was not qualified. Defendants argued that the expert, Danaher, had never taught a course or attended a course devoted to the subjects of his testimony, and inserted legal conclusions throughout his opinion, rendering his testimony unreliable and irrelevant. The expert as part of his experience, training and education, however, had developed an “awareness of the clinical signs of cocaine-induced excited delirium” and was aware that the diagnosis of excited delirium was “common with cocaine abusers” and could result in serious health consequences unless responded to immediately. Id. at *11. According to the district court, the expert had 22 years experience as a police officer, and his personal knowledge and experience qualified him to render an expert opinion on police training, methods and policies, as well as clinical signs and dangers of excited delirium and positional asphyxia. The defendants’ arguments went to the weight and not the admissibility of his testimony. The district court further held that the expert could not express legal conclusions beyond the appropriate standard of reasonable conduct:

However, Mr. Donaher’s opinions in which he draws legal conclusions beyond the appropriate standard of reasonable conduct are unhelpful to the jury and he will therefore be precluded from testifying to those. Id.
In *Champion v. Outlook Nashville, Inc.*, 380 F. 3d 893 (6th Cir. 2004), a §1983 wrongful death action based on claims of excessive force and failure to render medical assistance to a 32-year old autistic arrestee, the Sixth Circuit declined to grant qualified immunity to arresting officers and held that the district court did not abuse its discretion in admitting the expert testimony of plaintiffs' expert regarding police procedures. The Sixth Circuit affirmed the district court’s holding that the testimony was reliable. Testimony at trial showed that the arrestee was unable to care for himself due to autism, was nonresponsive and unable to speak and was under the care of a facility that provided care for developmentally disabled persons. When the arrestee began to thrash about in a van, hitting himself in the face, slapping his head and biting his hand, the driver stopped the van and called 911, after which an officer came to the scene. The officer delivered a burst of pepper spray to the arrestee’s face when he kept approaching the officer. When other officers came to assist following a 10-35 (police code for mentally ill person), the officers struggled with and restrained the arrestee with handcuffs and a hobble device that bound his ankles together. Officers then allegedly continued to pepper spray him and to apply pressure to his back as he lay on his stomach and repeatedly vomited. When it appeared that he had taken his last breath, one of the officers could not find a pulse, the handcuffs were removed. The arrestee went into cardiac arrest and died en route to the hospital after this 17 minute ordeal. Plaintiffs’ claim was based on the officers' alleged use of pepper spray and application of asphyxiating pressure after the arrestee was incapacitated. In affirming the jury’s verdict awarding $900,0000 damages to the plaintiffs, the Sixth Circuit held that the officers were not entitled to qualified immunity since the type of physical force exerted against the arrestee was unreasonable, the officers' use of pepper spray after he was handcuffed, hobbled, blinded and incapacitated was excessive, and the officers' training showed they were aware of the arrestee's clearly established right to be free form this type of excessive force. The Sixth Circuit held:

> [I]t is also clearly established that putting substantial or significant pressure on a suspect's back while that suspect is in a face-down prone position after being subdued and/or incapacitated constitutes excessive force. This appeal gives us no cause to consider whether leaving a bound suspect on his or her stomach without more constitutes excessive force that violates a suspect's clearly established Fourth Amendment rights. This is neither a "positional asphyxia" case nor a case in which officers lightly touched or placed incidental pressure on [the arrestee's] back while he was face down. The asphyxia was caused by the combination of the officers placing their weight upon [the arrestee's] body by lying across his back and simultaneously pepper spraying him. Creating asphyxiating conditions by putting substantial or significant pressure, such as bodily weight, on the back of an incapacitated and bound suspect constitutes objectively unreasonable excessive force. *Id.* at 903.

The officers in *Champion* also argued on appeal that the damage award shocked the conscience in that expert testimony showed that the arrestee's death was relatively peaceful and that any of the three potential causes of his death – positional asphyxia, asphyxia resulting from gastric aspiration or cardiac arrest – would not have been particularly painful. The Sixth Circuit noted, however, that the jury heard inconsistent evidence concerning the arrestee's level of pain and declined to disturb the damage award.

Finally, the Sixth Circuit in *Champion* addressed the admissibility of the expert testimony of plaintiffs' expert in criminology, Geoffrey Alpert, who was allowed to testify about a discrete aspect of police practices, specifically excessive force, despite a lack of any specialized knowledge that was reliable or of any assistance to the jury. According to the Sixth Circuit, the expert's testimony was based on his particularized knowledge about the area, and his credentials were more extensive and substantial than those of experts in other
cases who were shown to have limited experience, or who held law enforcement positions that required almost no qualifications, or lacked formal training or experience, and gave ungrounded or methodologically flawed testimony. In this case, however, the Sixth Circuit found that the expert was employed by a university’s department of criminology, taught classes on police procedures and practices, had been involved with federal research funded by the Justice Department evaluating the use of force by officers, trained officers in the use of force, worked with police departments to create use-of-force policies, had testified before Congress and state legislatures about police policies, wrote forty to fifty articles on the subject of police procedures, many in peer-reviewed journals, and testified here about the proper actions of individual officers in one discrete situation rather than testifying about the impact of police policies on a large group of officers. The Sixth Circuit concluded that the trial judge did not abuse his discretion in admitting this expert's testimony in light of his experience in the field of criminology and because he was testifying about a discrete area of police practices about which he had specialized knowledge. *Id.* at 908-09.

**Price and Johnson: Irreconcilable Results**

In *Price v. County of San Diego*, 990 F. Supp. 1230 (S.D. Cal. 1998), a positional asphyxia case, the district judge excluded the expert testimony of Dr. Donald Reay after concluding that the work of Dr. Reay, a scientist credited with first hypothesizing the concept of positional asphyxia, was successfully refuted by Dr. Tom Neuman. In *Price*, Dr. Neuman attacked the methodology and results of the plaintiff's expert, and refuted both the premise that blood oxygen levels decrease after exercise and the conclusion that being restrained in a prone position prevents the lungs from replenishing the blood's oxygen supply; further, the plaintiff's expert in *Price* conceded that the restraint in that case was physiologically neutral.

A different and irreconcilable holding resulted in *Johnson v. City of Cincinnati*, 39 F. Supp. 2d. 1013, 1019-20 (S.D. Ohio 1999). Dr. Neuman was also the expert for the city in *Johnson*. Unlike the trial court in *Price*, the trial court in *Johnson* refused to intervene in what it considered a battle of the experts. *Johnson* was a §1983 wrongful death action brought by the family of an arrestee who was restrained by emergency personnel while suffering an epileptic seizure and who suddenly died as a result of delirious mania and restraint. In *Johnson*, the district judge denied a defense motion for summary judgment after he refused to strike the report of plaintiff's expert, a forensic pathologist, over a defense objection that it should not be considered scientific evidence, where (1) the study by Dr. Donald Reay was the critical foundation of subsequent studies supporting sudden death by agitated delirium with restraint, and (2) those subsequent studies included studies of plaintiff's expert in *Johnson*. The court's reasoning was that only Dr. Reay was specifically challenged in *Price*, and the studies of the plaintiff's expert in *Johnson* "may not have used the same methodology found to be flawed in *Price.*" *Id.* at 1017. The district judge in *Johnson* refused to hold the clearly refuted expert testimony of plaintiff's expert inadmissible, and gave this as its reasoning:

Because Dr. Reay's study appears to be a critical foundation of subsequent studies supporting sudden death by agitated delirium with restraint, including those by Dr. O'Halloran, the City argues that Dr. O'Halloran's report should not be considered scientific evidence. The Court disagrees and believes this is a classic "battle of the experts" situation. First, Dr. O'Halloran offers his own published study on agitated delirium with restraint as support for his conclusion regarding Wilder. In *Price*, only Dr. Reay was specifically challenged. Dr. O'Halloran's studies may not have used the same methodology found to be flawed in *Price*.
Second, the University of San Diego study published by Dr. Neuman and his colleagues has its own limitations which makes questionable its application to Wilder's death. The University of San Diego study was restricted to healthy subjects. It did not attempt to duplicate field conditions. Finally, the study admitted that underlying medical conditions, intoxication, agitation, delirium, struggle, and body position could all affect respiration in a way that the study could not detect. Chan, Vilke, Neuman, & Clausen, Restraint Position and Positional Asphyxia, Annals of Emergency Medicine, November 1997.... At the time of his death Wilder was obese, had tested positive for marijuana, and was suffering from agitated delirium. These factors differentiate him from the study participants. On the basis of the record before the Court at this time, the Court cannot conclude that the University of San Diego study debunks the theory of positional asphyxia to an extent rendering the testimony of Dr. O'Halloran inadmissible as scientific evidence. Id. at 1017.

The district court went further in Johnson, moreover, and held that the plaintiffs were able to defeat summary judgment by creating a genuine issue of material fact that the manner by which the defendants restrained the decedent was closely related to or caused his death. The district court relied in part on the expert report of the same challenged expert, as well as a press release issued by the county coroner describing the condition of agitated delirium with restraint, with whom the challenged expert agreed regarding the decedent's death from the effects of restraint while in a mental state of agitated delirium. The district court declined to grant summary judgment despite the substantially supported testimony of the defense expert, Dr. Neuman, that the decedent died of a sudden cardiac arrhythmia as a result of his enlarged dilated heart, that asphyxia was not the cause of death, and that the restraint position did not cause a physiologically relevant change in the decedent's condition.

Rejection of Positional Asphyxia as Result of Excessive Force

In Garrett v. Athens-Clarke County, 378 F. 3d 1274 (11th Cir. 2004), plaintiffs brought a wrongful death action based on a claim of excessive force case in which the decedent arrestee had repeatedly placed lives in danger by engaging police in a multi-county high speed chase. That chase did not end until the arrestee crashed twice. When the officers tried to restrain the arrestee once his truck was stopped by simple handcuffing, the arrestee ran, fought the police, and kicked violently until pepper sprayed. The arrestee then became compliant, at which time the officers immediately fettered him with a hobble cord, a nylon strap with a metal snap at one end that could connect to a pair of handcuffs and a permanent loop on the other end that secures ankles, knees or elbows, after which the arrestee lay fettered in a prone position and was found to have no pulse. The Eleventh Circuit held that the trial court erred when it refused to grant summary judgment in favor of defendant police officers on individual capacity claims. The arrestee had died from positional asphyxia after being fettered by the officers, but there was no competent evidence that supported the view that death or serious injury was a likely consequence of fettering a person as was done in this case. An autopsy revealed that methamphetamine and amphetamine were in the decedent's system and were contributing factors of death. The plaintiff argued on appeal that the officers were not entitled to qualified immunity since their fettering of the arrestee was excessive in that the restraint had a high potential of resulting in death when applied to a person in the arrestee's condition and was unnecessary in light of his compliance after being pepper sprayed. Rejecting this excessive force argument for lack of sufficient evidence and reversing and remanding, the Eleventh Circuit held at 1279-80:

Plaintiff first argues that fettering Irby was excessive force because the fettering posed a high potential of death, but plaintiff does not point us to competent evidentiary support for that argument. And in our review
of the expert medical testimony in this case, we have found no statement quantifying -- or even attempting to quantify -- the risk of death posed by fettering. No competent evidence in this case supports the view that death or serious injury is a likely consequence of fettering a person as Irby was fettered.

For plaintiff's medical experts to testify that fettering a person poses some risk of death is not enough. Almost every use of force, however minute, poses some risk of death. ... But that does not make all use of force unreasonable. Furthermore, plaintiff's argument itself relies on the proposition that the fettering carried with it a high risk of death.

Plaintiff does offer expert police testimony and additional materials in an effort to show that a reasonable officer would have known that fettering has a high risk of death for certain persons. But that evidence presumes that fettering is a dangerous practice: that evidence does not - - and cannot -- establish that fettering in fact poses a high potential for death or serious bodily injury. Unlike the risk of death from firearms, the risk associated with fettering is not of such common knowledge that we could notice -- without expert medical testimony -- that fettering does indeed pose a high risk of death.

Furthermore, plaintiff does not dispute defendants' argument that the additional materials (mostly police publications and police policies from other jurisdictions) are inadmissible under Federal Rule of Evidence 703. Instead, plaintiff states that they are offering the materials only for notice. Because the materials are not offered for the truth of their content, they cannot establish that fettering poses a high risk of death. Without expert medical testimony quantifying to some degree the risk of death or serious bodily injury, plaintiff cannot establish that fettering under the circumstances in this case posed a high risk of death. Therefore, we conclude that plaintiff's first argument on excessive force fails for lack of sufficient evidence. (internal quotation marks and citations omitted)

In *Sallenger v. City of Springfield*, 2005 U.S. Dist. LEXIS 18202 (C.D. Ill. August 4, 2005), one of the plaintiffs’ experts sought to give opinion testimony that a hobble restraint could cause positional asphyxia. The trial court excluded this evidence on the ground that the expert’s testimony was not adequately explained or properly supported. One of the plaintiffs’ experts, Dr. Michael Lyman, submitted an expert report that relied in part on the International Association of Chiefs of Police Model Policies and Standard of Care Statement, but the expert never explained why the model policies of the IACP were a recognized authority in the field of police work. While this expert report was admitted based on a defense stipulation, the expert testimony of another expert for the plaintiffs, Dr. John Taraska, was excluded. Dr. Taraska testified that the decedent arrestee became unable to breathe and suffered cardiac arrest based on the fact that officers were on top of him and his diaphragm couldn’t move. Dr. Taraska also opined that positional asphyxia resulted from the use of the hobble and secretion of norepinephrine. These expert opinions were not considered by the trial court in ruling on the defense motion for summary judgment because those opinions were “not adequately explained under [Rule 702]” in the expert’s Rule 26 report and deposition, although the court would consider the expert’s opinion on the role that the force used by the officers and the position of the parties played in causing the decedent’s death. *Id.* at *36.

*Drummond: “Deadly History” of Force*

In *Drummond v. City of Anaheim*, 342 F. 3d 1052 (9th Cir. 2003), officers handcuffed a mentally ill person and leaned their body weight onto his upper torso and then applied a hobble device, after which the arrestee fell into
respiratory distress and a coma. The district court granted summary judgment on the basis of qualified immunity, but the Ninth Circuit reversed, holding that the officers had violated the arrestee's clearly established rights and that any reasonable officer should have known that such conduct constituted use of excessive force. The Ninth Circuit observed that when the officers received training explaining the dangers of asphyxia, they were on notice that applying pressure to an arrestee's back was objectively unreasonable. The evidence, including testimony from independent eyewitnesses, showed that after the 160 pound arrestee was knocked to the ground by one officer and his arms were cuffed behind his back, two officers, one weighing about 225 pounds, put their knees into his back upper torso and neck and placed the weight of their bodies on him, while he repeatedly told the officers that he could not breathe and that they were choking him. He was then placed in a hobble restraint and his ankles were bound. He then went limp, fell into respiratory distress and sustained brain damage, as a result of which he was now in a persistent vegetative state. Plaintiff's expert in neurology was also his treating physician, and submitted a declaration stating that "to a reasonable medical probability the arrestee suffered a cardiopulmonary arrest caused by mechanical compression of his chest wall such that he could not inhale and exhale normally, and this occurred while he was face-down on the ground and the police officers set upon his back preventing the anterior wall of his chest from expanding." Id. at 1055. In reversing summary judgment and remanding, the Ninth Circuit stated at 1056-58:

Although the officers in this case did not shoot or beat Drummond, the force allegedly employed was severe and, under the circumstances, capable of causing death or serious injury. Drummond claims that two officers continued to press their weight on his neck and torso as he lay handcuffed on the ground and begged for air. Under similar circumstances, in what has come to be known as "compression asphyxia," prone and handcuffed individuals in an agitated state have suffocated under the weight of restraining officers. See, e.g., Jones v. Ralls, 187 F.3d 848, 850, 852 n.4 (8th Cir. 1999); Bozeman v. Orum, 199 F. Supp. 2d 1216, 1226 (M.D. Ala. 2002); Tofano v. Reidel, 61 F. Supp. 2d 289, 292-95 (D.N.J. 1999); Alexander v. Beale St. Blues Co., 108 F. Supp. 2d 934, 939 (W.D. Tenn. 1999); Johnson v. City of Cincinnati, 39 F. Supp. 2d 1013, 1018 (S.D. Ohio 1999)....

Minimal Need for Force

The Ninth Circuit in Drummond further noted that even though this type of force has a "deadly history," it was not clear whether the force applied in this case constituted "deadly force" under Tennessee v. Garner, 471 U.S. 1 (1985). Under Ninth Circuit precedent, Vera Cruz v. City of Escondido, 139 F.3d 659, 663 (9th Cir. 1998), "not merely the quantum of force, but also how that force is applied, may render it more or less likely to cause death." The Ninth Circuit pretermitted this issue based on its finding that there was a genuine issue of material fact as to whether the force used was constitutionally excessive under the ordinary Graham balance. The Ninth Circuit then turned to the minimal need for force as applied to the facts of this case:

Applying the Graham factors to the physical restraint of Drummond, we note first that no underlying crime was "at issue" -- the police had become involved solely because a neighbor was worried that Drummond was acting in an emotionally disturbed manner and might injure himself. Second, while Drummond may have represented a threat (to himself or possibly others) before he was handcuffed -- an action that he does not claim was in itself an excessive use of force -- after he was "knocked . . . to the ground where the officers cuffed his arms behind his back as [he] lay on his stomach," a jury could reasonably find that he posed only a minimal threat to anyone's safety. Finally, evidence in the record derived from an independent eyewitness

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unequivocally states that once Drummond was on the ground, he "was not resisting the officers"; there was therefore little or no need to use any further physical force. All three Graham factors would have permitted the use of only minimal force once Drummond was handcuffed and lying on the ground.

Furthermore, we have held that detainee's mental illness must be reflected in any assessment of the government's interest in the use of force:

The problems posed by, and thus the tactics to be employed against, an unarmed, emotionally distraught individual who is creating a disturbance or resisting arrest are ordinarily different from those involved in law enforcement efforts to subdue an armed and dangerous criminal who has recently committed a serious offense. In the former instance, increasing the use of force may, in some circumstances at least, exacerbate the situation; in the latter, a heightened use of less-than-lethal force will usually be helpful in bringing a dangerous situation to a swift end. In the case of mentally unbalanced persons, the use of officers and others trained in the art of counseling is ordinarily advisable, where feasible, and may provide the best means of ending a crisis. . . . Even when an emotionally disturbed individual is "acting out" and inviting officers to use deadly force to subdue him, the governmental interest in using such force is diminished by the fact that the officers are confronted, not with a person who has committed a serious crime against others, but with a mentally ill individual. We do not adopt a per se rule establishing two different classifications of suspects: mentally disabled persons and serious criminals. Instead, we emphasize that where it is or should be apparent to the officers that the individual involved is emotionally disturbed, that is a factor that must be considered in determining, under Graham, the reasonableness of the force employed.

Balancing Severity With Need for Force

Finally, the Ninth Circuit in Drummond addressed the balancing of the severity of the force against the minimal need under the facts presented in this record,

Ultimately, our duty to balance the officers' substantial application of force against the government's less-than-overwhelming interest in that force amounts to determining whether the force employed was "greater than is reasonable under the circumstances." Santos, 287 F.3d at 854. This determination "must be judged from the perspective of a reasonable officer on the scene, rather than with the 20/20 vision of hindsight. . . . The calculus of reasonableness must embody allowance for the fact that police officers are often forced to make split-second judgments -- in circumstances that are tense, uncertain, and rapidly evolving -- about the amount of force that is necessary in a particular situation." Graham, 490 U.S. at 396-97. Nevertheless, "it is equally true that even where some force is justified, the amount actually used may be excessive." Santos, 287 F.3d at 853.

Here, some force was surely justified in restraining Drummond so that he could not injure either himself or the arresting officers. However, after he was handcuffed and lying on the ground, the force that the officers then applied was clearly constitutionally excessive when compared to the minimal amount that was warranted. Drummond was a mentally disturbed individual not wanted for any crime, who was being taken into custody to prevent injury to himself. Directly causing him grievous injury does not serve that objective in any respect. Once on the ground, prone and handcuffed, Drummond did not resist the
arresting officers. Nevertheless, two officers, at least one of whom was substantially larger than he was, pressed their weight against his torso and neck, crushing him against the ground. They did not remove this pressure despite Drummond's pleas for air, which should have alerted the officers to his serious respiratory distress. Moreover, according to independent eyewitnesses, other officers "stood around and laughed" while Drummond was restrained; although the officers' "underlying intent or motivation" is irrelevant to the excessive force inquiry, Graham, 490 U.S. at 397, the officers' apparent lack of concern does indicate that Drummond was not sufficiently dangerous to others to warrant the use of the severe force applied.

The officers -- indeed, any reasonable person -- should have known that squeezing the breath from a compliant, prone, and handcuffed individual despite his pleas for air involves a degree of force that is greater than reasonable. In this case, it is even more striking that the officers had been specifically warned of the extreme danger of this sort of force. Not only was there ample publicity in Southern California regarding similar instances of asphyxiation as a result of the use of similar force in the months before the incident, see $ 650,000 Settlement OKd in Inmate Death, L.A. TIMES, Feb. 24, 1999, at B4; Supervisors Asked to OK $ 2.5 Million to Settle Suits, L.A. TIMES, Feb. 2, 1999, at B1; but, more important, the Anaheim police department had issued a training bulletin in April of 1998 specifically warning officers that "when one or more [officers] are kneeling on a subject's back or neck to restrain him, compression asphyxia can result ['t]hat may be a precipitating factor in causing death." Anaheim Training Bulletin # 98-14 (Apr. 1998). Although such training materials are not dispositive, we may certainly consider a police department's own guidelines when evaluating whether a particular use of force is constitutionally unreasonable. As the Fifth Circuit stated, "it may be difficult to conclude that the officers acted reasonably if they performed an action that had been banned by their department or of whose dangers in these circumstances they had been warned." Gutierrez v. City of San Antonio, 139 F.3d 441, 449 (5th Cir. 1998). See also Scott v. Henrich, 39 F.3d 912, 916 (9th Cir. 1994) ("Thus, if a police department limits the use of chokeholds to protect suspects from being fatally injured, . . . such regulations are germane to the reasonableness inquiry in an excessive force claim.") (internal citations omitted). Id. at 1058-59.

The Ninth Circuit in Drummond concluded that the officers' use of severe force was constitutionally excessive, applying that circuit's summary judgment appellate review standard. It noted that plaintiff had also presented an affidavit from a former deputy chief of the Long Beach Police Department, a person with 30 years experience as a police officer, which, while not necessarily considered or admitted by the trial court as expert testimony, was nonetheless significant enough on the issue of excessive force vel non to be quoted at length. The Ninth Circuit noted that after considering a "comprehensive set of materials," this form deputy chief stated:

reasonable police officers could not believe that they were acting appropriately [for reasons which include] the facts that there were numerous and egregious violations of standard police practice, violations of a number of Anaheim's own policies and procedures, the numerous protestations of Mr. Drummond witnessed by at least two independent witnesses that he breathe, the fact that he was not being stopped for a serious crime but mental disturbance, the fact that after he was cuffed be presented little objectively reasonable threat of flight or to the safety of the officers, and the cavalier, perhaps malicious, attitude of the officers reflected by the fact that, if true, they were laughing at Drummond during the incident. Further, . . . Anaheim's
Police Department had [a] long-standing policy for many years prior to the incident which warned of putting arrestees in Drummond’s state at risk of failure. *Id.* at 160.

In other positional asphyxia cases decided by the 5th, 7th and 11th Circuits, the common denominator in *Wagner v. Bay City*, 227 F. 3d 316, 323-24 (5th Cir. 2000), *Estate of Philips v. City of Milwaukee*, 123 F. 3d 586, 594 (7th Cir. 1997), and *Cottrell v. Caldwell*, 85 F. 3d 1480, 1491-92 (11th Cir. 1996), was that each involved an arrestee whose positional asphyxia was caused solely as a result of officers leaving an arrestee on his or her stomach, but without applying pressure to the back.

*Champion* and *Drummond* were distinguished in *Bornstad vs. Honey Brook Township*, 2005 U.S. Dist. LEXIS 19573 (E.D. Pa. September 9, 2005). In *Bornstad* the trial judge rejected a defense challenge to expert testimony of a forensic pathologist and a licensed physician that the decedent had died primarily as a result of compression asphyxia. Their testimony was based on autopsy results, interviews with arresting officers and investigators, and the expert’s extensive background knowledge of asphyxia. Although the trial judge ultimately granted a defense motion for summary judgment, it rejected the defense efforts to exclude the expert testimony of Ian Hood, deputy medical examiner for Philadelphia, whose expert testimony was to be used to establish that the decedent had died primarily as a result of compression asphyxia. The district court made the following fact-intensive assessment of the expert’s testimony and concluded that it rested on a reliable foundation:

Hood’s external examination of Bornstad revealed that he had petechiae of the eyelids. … According to Hood, petechiae are sometimes present when an individual dies from compression asphyxia. … During the internal examination, Hood discovered that Bornstad’s brain appeared dusky. A dusky brain, which has a plum purple gray color, is a brain that has been deprived of oxygen. This “is entirely consistent with asphyxia.” … Hood explained that “the only way I can diagnose asphyxia at autopsy is by that very plum-purple, dusky-looking brain.” … In addition, Hood received information about the circumstances surrounding Bornstad’s arrest from both the Chester County detectives who conducted witness interviews and a field investigator at the coroner’s office. … Based on all of this information, Hood ruled out various causes of death and concluded in his … autopsy report that Bornstad’s primary cause of death was compression asphyxia. … He concluded that this asphyxia, combined with Bornstad’s arteriosclerotic coronary vascular disease, led to his death. …

In reviewing the record, we conclude that Hood’s expert testimony regarding compression asphyxia rests on a reliable foundation. Hood compiled information about Bornstad’s death from several sources, including witness interviews and his own competent autopsy of Bornstad. Applying his extensive background knowledge of forensic pathology generally and asphyxia specifically, he reviewed all of this information and concluded that compression asphyxia was a significant contributing factor in Bornstad’s death. We understand that several forensic pathologists may review the same data regarding a person’s death and arrive at different conclusions regarding the cause of that death. In fact, in this case defendants’ experts have reviewed many of the same materials on which Hood relied but arrived at different conclusions. Such disagreements, however, do not make Hood’s own methods unreliable. We are satisfied that Hood’s methodology in determining Bornstad’s cause of death is sound. *Id.* at *36-38 (internal quotation marks and citations omitted).
Notwithstanding the trial court’s admission of plaintiffs’ expert testimony, the trial court held that the officers’ use of force was reasonable and necessary and therefore not excessive force, and did not violate the Fourth Amendment rights of the decedent. Addressing the merits of the plaintiffs’ argument that the officers had been on top of the decedent and that their four-point restraint of the decedent’s extremities and repeated use of pepper spray constituted genuine issues of material fact as to whether the officers’ conduct caused the decedent to die from compression asphyxia, the trial court nonetheless held that qualified immunity applied:

When the officers tried to arrest Bornstad, he actively and violently resisted them. Bornstad posed an immediate threat to the officers as he continued to fight with them. Faced with an individual who wanted to engage in a brawl rather than be arrested, the officers acted reasonably, even assuming that they were on top of Bornstad, that they restrained his extremities, and that they used pepper spray. Even after the officers repeatedly instructed Bornstad to stop fighting, he continued to resist arrest, kicking and screaming at them during the struggle. Restraining a person in a prone position is not, in and of itself, excessive force when the person restrained is resisting arrest. … The officers had no reasonable alternatives in dealing with Bornstad other than trying to restrain him. It was Bornstad, after all, who began his unabated physical attack on Baxter and Sasso and then continued to fight even after the backup officers arrived. Confronted with an individual who was out of control, and was refusing to be arrested, none of the officers drew their weapons or physically retaliated against Bornstad. … Rather, when Bornstad refused to comply with any of the officers’ requests, the officers acted reasonably in attempting to restrain him. *Id.* at *63-64.

The trial court concluded that each defendant officer was entitled to qualified immunity on the plaintiffs’ Fourth Amendment excessive force claims. It was clear from the record that reasonable police officers in the officers’ positions could also find the officers’ conduct to be objectively reasonable and that the circumstances surrounding the decedent Bornstad’s arrest compelled the conclusion that officers of reasonable competence could at least disagree as to whether the officers’ conduct was reasonable. *Id.* at *68. The court further concluded that the plaintiff had failed to satisfy the burden of proving that the municipal defendants violated §1983 by failing to train police officers regarding compression asphyxia, stating at *77

A defendant’s failure to train its employees can ordinarily be considered deliberate indifference only where the failure has caused a pattern of violations. … Plaintiff offers no evidence that the failure of either municipality to train its police officers regarding compression asphyxia resulted in a pattern of constitutional violations. Although it is possible, proving deliberate indifference in the absence of such a pattern is a difficult task. … Here, the police officers were faced with an unusual situation. Bornstad actively and violently resisted arrest. Given Bornstad’s crazed response to being arrested, we fail to see how any suggestive deliberate indifference on the part of the municipal defendants played any part in this tragedy. (internal quotation marks and citations omitted).

As noted above, the court in Bornstad distinguished both *Champion* and *Drummond*, noting that unlike the facts of *Champion* and *Drummond*, the defendant police officers in this case restrained Bornstad and used pepper spray because he was actively and violently resisting arrest, and there was no evidence that the officers used any force at all after Bornstad stopped resisting. Unlike the decedent in *Champion* and *Drummond*, it was the decedent Bornstad’s continuing violent behavior that required a response, and according
to the trial court, “the response of the officers was perfectly reasonable under
the circumstances.” Id. at *65-66.

In Agster v. Maricopa County Sheriff’s Office, 2005 U.S. App. LEXIS 1509 (9th Cir. June 23, 2005) (unpublished opinion), the trial court denied qualified immunity to a sheriff, his deputies and a nurse in a wrongful death action brought by the parents of an arrestee, where the deputies had allegedly restrained the decedent to the point of positional asphyxia following an arrest on a misdemeanor charge of trespass. The arrestee was manacled and surrounded by officers in the jail at a time when he was not endangering the officers or himself but was uncooperative. The Ninth Circuit found that the arrestee’s lack of cooperation was no justification for applying force which was foreseeably dangerous to his life, particularly in view of the county’s own regulations that warned against the danger of “the chair” causing positional asphyxia. Citing Drummond, the Ninth Circuit held that the law was clearly established that forbade the deputies to deploy such a potentially lethal force, and the nurse in this case had failed to assess the decedent before he was restrained in the fatal chair, failed to check on his health while he collapsed in the chair, failed to respond to the warnings of other observers that he was in acute distress, and acted in conscious disregard of the excessive risk that the deputies’ treatment of the decedent was what caused his death. Id. at *6-7.

In Llerando-Phipps v. City of New York, 205 WL 2429760 (S.D.N.Y. September 29, 2005), an arrestee’s 1983 action alleging that police officers had violated his constitutional rights, the arrestee moved in limine to exclude the defendants’ expert testimony that went to the heart of defendants’ damage claim. The facts of the case were that following the plaintiff’s arrest for robbery and imprisonment overnight in the “Tombs” of Manhattan, and following dismissal of all charges under the state speedy trial act, the plaintiff brought a §1983 action for false arrest, in which he sought to exclude the city’s expert opinion evidence concerning his psychological and psychiatric status, substance abuse, alcoholism and poor academic record as the cause of his discontinuance of his graduate studies, rather than the arrest as the cause. This expert evidence was central to the plaintiff’s damage claim that the arrest and incarceration forced him to abuse drugs and alcohol. In denying the plaintiff’s motion in limine to exclude the expert testimony of the defendants’ expert and his accompanying expert report, the court reasoned that the expert was qualified because he possessed general expertise in the area of psychology, and his report was based on an evaluation of the record and satisfied Rule 702. The plaintiff had placed his psychological and emotional well being in issue, and the defense expert’s testimony and report concerning the plaintiff’s psychological history was probative and would assist the jury in assessing his claim. The expert’s statement in his report that there was no evidence to support the plaintiff’s claims was not a legal conclusion, but was an expression of an opinion that the plaintiff’s alleged history of substance abuse and misconduct, not the arrest, led to his excessive use of alcohol and illegal drugs, his termination from work, and his discontinuation of graduate studies. Id. at *7.

XXV. Daubert and Land Use, Zoning and Takings

In A.A. Profiles, Inc. v. City of Fort Lauderdale, 253 F.3d 576 (11th Cir. 2001), a commercial property owner's action for partial taking, the trial judge admitted testimony from the city's expert accountant that plaintiff's business would have failed even in the absence of the city's taking. The Eleventh Circuit held that the accountant's expert testimony was irrelevant and inadmissible, reasoning that the pertinent inquiry, for purposes of proving damages, was not whether the plaintiff's business would have succeeded, but rather whether the plaintiff's property suffered diminution in value.
Industry Bias Infecting Expert’s Study

Nichols Media Group, LLC v. Town of Babylon, 365 F. Supp. 2d 295 (E.D.N.Y. 2005), a company engaged in the outdoor sign and advertising business sued the towns of Babylon and Islip, New York, challenging the constitutionality of their sign ordinances. At issue was whether the sign ordinances sought to implement a substantial governmental interest, and here both towns identified those interests as aesthetics and traffic safety. The company in an attempt to downplay the issue of traffic safety proffered the expert testimony of a Virginia Tech Transportation Institute researcher on the issue of aesthetics. Her study purported to show that driver behavior was not influenced by the presence of billboards. The study was funded by the Foundation for Outdoor Advertising Research and Education, an affiliate of OAAA, the Outdoor Advertising Association of America, the leading trade association for those who erect billboard advertising. At trial OAAA’s representatives were “intimately involved in the design and conduct” of the expert’s study, the results of which were presented at an OAAA meeting where billboard industry leaders described the study as definite proof that billboards do not inhibit driver performance. The expert’s study had not been widely disseminated, it was not subject to peer review, and its conclusions had not been replicated in any other study.

The trial judge in Town of Babylon held that the expert’s study was “so infected by industry bias as to lack credibility and reliability,” stating:

This conclusion is supported not only by industry involvement in the design and execution of the study but also by the lack of peer review and the fact that there is no other scientific study with the same or similar conclusions regarding driver distraction. For these reasons, the court rejects [the defendants’ expert’s] conclusions regarding traffic safety. …

In an effort to establish the aesthetic value of billboards, or at least, that the proposed billboards would not detract from the Sunrise Highway landscape, [defendant] offered the testimony of [Steve Nichols, who opined] that the billboards planned to be erected on Sunrise Highway in Babylon and Islip were more aesthetically pleasing than other signs in the Towns. He further testified that such signs would result in no diminution in property values. Similar to the testimony of Dr. Lee, the court gives little weight to the testimony of Steve Nichols. That testimony was highly biased. Additionally, as discussed above, the erection of billboards along Sunrise Highway would materially alter, and have a negative impact upon, the existing landscape.

Rather than crediting the testimony offered by Nichols on aesthetics and safety, the court holds that the goals identified by Babylon and Islip, i.e., aesthetics and traffic safety, are "unequivocally substantial governmental objectives” … .

Expert Conclusion Lacking in Objectivity and Not Product of Independent Research

In A Helping Hand v. Baltimore County, 2005 WL 2453062 (D.MD. September 30, 2005) a private methadone treatment clinic sued the county based on alleged intentional discrimination in passing a restrictive zoning law. At issue was whether the clinic’s patients were disabled for purposes of the Americans with Disabilities Act and whether the county had intentionally discriminated against the clinic when it enacted a zoning law that restricted the clinic’s ability to operate. Both plaintiff and defendants filed motions for summary judgment, and the trial court denied summary judgment to both sides, holding that there was a genuine issue of material fact as to whether the
clinic’s clients were disabled and whether the county intentionally discriminated against them. The county contended that the plaintiff’s experts did not discuss the principles or methodology that formed the basis of their opinions that the plaintiff’s clients were regarded as disabled under the ADA. The trial court found, however, that the county’s Daubert objection was not dispositive, since the court did not rely solely on the expert testimony to find that the plaintiff clinic had provided sufficient evidence to demonstrate there was a genuine issue of material fact as to whether its clients were disabled, reasoning that “it is perfectly legitimate for the plaintiff’s experts to base their opinions on their professional clinical experience, as they have done.” *Id.* at *11.

In *AT&T Wireless Services of California v. City of Carlsbad*, 308 F. Supp. 2d 1148 (S.D. Cal. 2003), a cellular provider challenged the city’s decision to deny a conditional use permit (CUP) to place a "stealth" wireless antenna site on residentially zoned property, alleging violations of Telecommunications Act of 1996. Following a hearing on AT&T’s motion in limine to exclude the testimony of the city’s sole expert on the issue of suitability of several alternative locations for the proposed wireless antenna site, the trial judge excluded the city’s proffered expert testimony that other sites were potentially suitable for antenna, since the expert’s conclusions were not the product of independent research, and the expert did not present any objective criteria by which the court could evaluate his opinion. This was the court’s reasoning based on application of the Daubert trilogy:

In this case, even assuming Kramer is a qualified expert in radio frequency engineering, the city has failed to show by a preponderance of the evidence that Kramer’s conclusions in the tentative report and in his August 27, 2002 deposition are reliable. First, the city does not present any evidence that Kramer’s testimony and conclusions resulted from independent research unconnected with this case. Rather, the city hired Kramer with the express purpose that he study AT&T’s technical requirements and reach conclusions about possible alternative locations for AT&T’s wireless phone site. Second, the city admits that Kramer’s conclusions about possible alternative sites were based solely on a comparison of the documents provided him by AT&T and his physically visiting potential alternative sites. While Kramer opines on the availability of potential alternative sites in light of AT&T’s coverage goals and search ring, Kramer never presents any objective criteria by which the court may evaluate his opinion. This finding is reinforced by Kramer’s deposition testimony where Kramer states the basis for his conclusions that other cell sites were potentially available: "it is clear to an expert that these were potential sites that bear full investigation." What is notably lacking, despite the city’s assertion to the contrary, is any evidence that explains for the court how the review of the documents allowed Kramer to conclude the availability of alternative sites. Consequently, the reliability of Kramer’s conclusions are seriously compromised, and the court accords the conclusions virtually no weight at all. *Id.* at 1157.

In *J&V Development, Inc. v. Athens-Clarke County*, 387 F. Supp. 2d 1214 (N.D. Ga. September 26, 2005), a real estate developer sued the county alleging that the county’s denial of its application for a special land use permit to develop a subdivision violated the Fair Housing Act. Plaintiff and defendants each filed motions in limine challenging each other’s proposed experts. The trial court excluded the proffered expert opinions of the plaintiffs’ expert that the county’s denial of the special land use permit had a disparate impact on minorities, based primarily on faulty methodology and too great an analytical gap between the data and the opinions offered. After reviewing the Rule 26 expert disclosures, expert reports, experts’ curriculum vita, expert depositions and caselaw on Daubert issues, the trial court concluded that the plaintiff’s expert, Bachtel, had relied on the plaintiff and
the plaintiff’s counsel to tell him that minorities could afford the homes planned for the subdivision. The court found that such a source of information offered very weak support for the expert’s major conclusions on disparate impact. It concluded that the expert’s opinion testimony that the denial of the SLUP permit for the plaintiff’s proposed development impacted minorities more than it did whites “is a separate conclusion based on scientific, technical or specialized knowledge that must rest on a valid methodology. Plaintiff has not carried the burden of showing a reliable methodology to support Bachtel’s disparate impact opinions.” In this regard the court found very little testimony to satisfy Daubert, noting that the expert did not explain how one could test his methodology, but that when the defense expert did test it, he exposed the statistical flaws underlying the plaintiff’s expert’s key opinions. Further, the plaintiff’s expert offered no testimony about the error rate for his methodology, and gave no information about the peer review of his methods of key opinions. Finally, the plaintiff’s expert offered no testimony about publication of his methodology as applied to his key conclusions in the case, and offered no evidence about the general acceptance of his methods for reaching his final opinions about disparate impact. Id. at 1225. The trial court found that the plaintiff had not presented adequate testimony to demonstrate the reliability of expert’s methodology to admit his key conclusions that the county’s denial of the plaintiff’s development had a disparate impact on minorities stating:

Bachtel’s other reliable opinions and his strong credentials cannot salvage the invalidity of his methodology on this key point. It is insufficient for the expert to merely vouch for the reliability of his own methodology. … The court cannot just take plaintiff’s counsel’s or Bachtel’s word that his method was reliable and that he gave reliable opinions.

The court concluded that the plaintiff’s expert would not be allowed to testify that the county’s denial of the SLUP for the plaintiff’s development disparately or disproportionately impacted blacks, Hispanics or a combined group of minorities, that the county’s actions perpetuated or failed to alleviate segregation, that its actions resulted in unequal treatment for minorities or denied them appropriate places to live, or that the county’s actions had any discriminatory affect. The expert was further precluded from offering any opinions about the racial and ethnic makeup of the market for homes in the proposed subdivision. Id. at 1228.

XXVI. Polygraph Examinations

Frye dealt with the admissibility of polygraph findings. Post-Daubert, a number of courts have rejected a per se rule against the admissibility of such evidence and have called for a particularized determination to be made by the trial judge, in the exercise of her gatekeeping responsibility, as to whether such evidence is reliable enough to satisfy Rule 702 and whether its probative value outweighs any potential prejudicial effects under Rule 403, as the Fifth Circuit held in United States v. Posado, 57 F3d 428 (5th Cir. 1995). See generally J. Theuman, Admissibility in Federal Criminal Case of Results of Polygraph Test – Post-Daubert Cases, 140 A.L.R. Fed. 525 (2005). In 1998, the Supreme Court in United States v. Scheffer, infra, observed that "state and federal rule makers have broad latitude under the Constitution to establish rules excluding evidence from criminal trials. Such rules do not abridge an accused's right to present a defense so long as they are not "arbitrary" or "disproportionate to the purposes they are designed to serve."

Given this wider latitude and invitation for lack of uniformity relative to exclusion of evidence in criminal cases, other courts of appeal have considered and rejected polygraph evidence as unreliable, some relying on Daubert and others on Rule 403. See United States v. Cordoba, 194 F. 3d 1053 (9th Cir. 1999), the Ninth Circuit affirmed the district court's finding that
a polygraph was unreliable. In *United States v. Thomas*, 167 F. 3d 299, 308-09 (6th Cir. 1999), the Sixth Circuit affirmed the trial court's exclusion of polygraph evidence, noting that polygraph evidence obtained by one party is almost never admissible under Rule 403, because of the danger of unfair prejudice, but declined to decide whether *Daubert* affects the general rule of inadmissibility. The Court elaborated on its sidestep of *Daubert*, stating that "[e]ven if we were to assume, as did the district court, that *Daubert* called our aversion to polygraph examinations into question, we would agree with the district court that admitting the results of the polygraph in the case sub judice would have violated the principles of Rule 403. In this case, Thomas took a private polygraph test administered by an examiner hired by his family, and did not inform the government of his test results until after he had taken the examination. We have repeatedly held that "unilaterally obtained polygraph evidence is almost never admissible under Evidence Rule 403." *Id.* at 308-09.

In *United States v. Prince-Oyibo*, 320 F. 3d 494, 497-501 (4th Cir. 2003), the Fourth Circuit affirmed a per se rule of inadmissibility of polygraph evidence. *Contra United States v. Posado*, 57 F.3d 428 (5th Cir. 1995) (rejecting per se rule). *Posado* was cited three years later in *Castillo v. Johnson*, 141 F.3d 218, 222 (5th Cir. 1998), in which the Fifth Circuit stated that neither *Daubert* nor *Posado* "purported to address the issue of the admissibility of polygraph evidence in the context of federal constitutional law. Accordingly, neither case recognizes a federal constitutional right to admit polygraph evidence." In those circuits which apply the *Daubert* reliability test to polygraph evidence, the proponent must lay the foundation for the trial judge to decide its reliability. See also *United States v. Gianakos*, 2005 U.S. App. LEXIS 15236 (8th Cir. July 26, 2005) (*Before polygraph results may be admitted, the party seeking its admission must lay a proper foundation for the district court to decide its reliability.*). "Employee Polygraph Protection Act

To complicate matters further, federal legislation entered this field five years before *Daubert* was decided. The Employee Polygraph Protection Act (EPPA) became effective upon passage in 1988 and prohibits an employer from requesting a polygraph examination from an employee, even when the examination is ultimately not administered. See *Polkey v. Transtecs Corp.*, 404 F. 3d 1265 (11th Cir. 2005) (Where employee was asked to submit voluntarily to a polygraph examination and to sign a general release form, his refusal to submit to a lie detector was deemed a violation of a work rule, resulting in his being fired. In granting the employee summary judgment under EPPA, the Eleventh Circuit noted that EPPA explicitly states that even a "request" to take a lie detector test violates the statute). Accord, *Calbillo v. Cavender Oldsmobile, Inc.*, 288 F. 3d 721, 726 (5th Cir. 2002) (EPPA makes it illegal for an employer to "request that an employee take a polygraph examination"); *Hossaini v. Western Mo. Med. Cir.*, 140 F. 3d 1140, 1143 (8th Cir. 1998). It should be noted that an employer may request an employee to take a polygraph examination during an ongoing investigation after proper notice, but if the employee refuses to take the examination, he or she cannot be disciplined for failure to take it.

**Nawrocki: Admission for Limited Purpose**

Some courts are not inclined to exclude polygraph evidence for all purposes, even in light of the Employee Polygraph Protection Act (EPPA). For example, in *Nawrocki v. Township of Coolbaugh*, 2002 U.S. App. LEXIS 6557 (3d Cir. 2002), an unpublished opinion, a school teacher received various anonymous threatening and pornographic letters, and another teacher was suspected of being their source. The school district arranged for a polygraph of the suspected teacher, and the polygrapher concluded that the suspected teacher was responsible for the subject letters. The teacher who had received
the letters filed criminal charges against the suspected teacher, who was acquitted, following which the suspected teacher brought a §1983 malicious prosecution claim against the teacher who had received the letters. The district court entered judgment as a matter of law for the defendant teacher, in part because polygraph results supplied probable cause. The Third Circuit upheld the admissibility of the polygraph results, noting that such evidence was not admitted for its truth, but to show probable cause. Although most private employers have omitted lie detector tests from their human resources arsenal, there have been few federal court decisions interpreting the statute.

Per Se Exclusion of Polygraph Evidence

Although most appellate courts have continued to exclude polygraph evidence, the trial judge in Nawrocki did not err in admitting polygraph findings for this limited purpose. A per se exclusion of polygraph evidence at court martial proceedings was approved by the Supreme Court, which recognized that "there is simply no consensus that polygraph evidence is reliable," United States v. Scheffer, 523 U.S. 303, 309 (1998). The Court held that a per se rule against admission of polygraph evidence did not violate the Fifth or Sixth Amendment rights of the accused to present a defense. Similarly, in United States v. Piccinonna, 885 F.2d 1529 (11th Cir. 1989), the Eleventh Circuit held that polygraph evidence may be admissible upon stipulation or for impeachment or corroboration. Finally, illustrative of the split in the circuits on the issue, the Fifth Circuit in United States v. Posado, 57 F.3d 428 (5th Cir. 1995), declined to adopt a per se rule of inadmissibility of polygraph evidence.

Admissibility Determined Under Rule 403

The trial court evaluated the admissibility of polygraph evidence under Daubert in United States v. Ross, 2005 U.S. App. LEXIS 11763, *4-6 (7th Cir. June 20, 2005), an appeal from a conviction for possession of a firearm by a felon. The defendant argued on appeal that the trial judge erroneously excluded the results of a privately commissioned polygraph examination. Affirming, the Seventh Circuit held that the trial judge properly analyzed the admissibility of such evidence under Rule 403 and Daubert's expert evidence rule, noting that the trial judge, a former state judge, had stated at trial that he was familiar with the blanket prohibition of such evidence under state law, here the law of Illinois which prohibits polygraph evidence altogether. In finding no abuse of discretion, the Seventh Circuit reasoned that the trial judge had recognized that there is no similar ban in federal court and then proceeded to analyze the admissibility question under Rule 403 and the expert witness test enunciated in Daubert v. Merrell Dow Pharmaceuticals, Inc. The court therefore applied the correct legal standard.

There was no abuse of discretion here because, for one thing, the manner in which the test was administered - privately commissioned, in the eleventh hour, and without notice to the government - was highly suspect. Not surprisingly, Ross fails to identify another case where polygraph evidence was admitted in similar circumstances. Indeed, courts have routinely rejected unilateral and clandestine polygraph examinations like the one taken here, citing concern that a test taken without the government's knowledge is unreliable because it carries no negative consequences, and probably won't see the light of day if a defendant flunks. See United States v. Tucker, 773 F.2d 136, 141 (7th Cir. 1985); United States v. Williams, 737 F.2d 594, 611 (7th Cir. 1984); United States v. Feldman, 711 F.2d 758, 767 (7th Cir. 1983); United States v. Thomas, 67 F.3d 299, 309 (6th Cir. 1999); United States v. Sherlin, 67 F.3d 1208, 1217 (6th Cir. 1995); United States v. Beck, 729 F.2d 1329, 1332 (11th Cir. 1984).
Unilaterally Obtained or Privately Commissioned Polygraph Examinations

Most courts are in agreement that unilaterally obtained polygraph evidence is almost never admissible under Rule 403 as not sufficiently probative. In Conti v. Commissioner, 39 F.3d 658, 662 (6th Cir. 1994), defendants charged with underreporting their income claimed that they had amassed a hoard of cash from, inter alia, a "frugal lifestyle, working double and triple shifts without vacation time, cash gifts from a parent who had accumulated cash from the sale of wine and beer during Prohibition, and sales of Nazi weapons during and after World War II." After taking privately administered polygraph tests, the defendants sought to have the results of the tests admitted. One of their grounds for admissibility was that "the United States Supreme Court recently rejected the Frye standard, holding that general acceptance is not a prerequisite for the admissibility of scientific evidence under Rule 702, and that it is only one of a number of factors that a court should assess in determining whether to admit such evidence.” The Tax Court held that the results of the unilateral polygraph tests were inadmissible on two grounds, first, that the tests did not satisfy the "general acceptance" standard of Frye v. United States … as applied to Rule 702, and second, the tests were inadmissible under Rule 403. On appeal from an adverse decision by the Tax Court, defendants argued for admission of this evidence under Daubert, but the Sixth Circuit affirmed, stating that if the Rule 403 basis for exclusion is valid,

we need not consider whether the Tax Court actually conducted a proper analysis of the polygraph evidence under the Supreme Court's decision in Daubert, with respect to Federal Rule of Evidence 702, but can affirm the denial of the polygraph results on an independent basis.

Similarly, the Sixth Circuit in United States v Sherlin, 67 F.3d 1208, 1216 (1995), cert. den., 516 U.S. 1082, 133 L. Ed. 2d 744, 116 S. Ct. 795 (1996) held that "in the absence of a prior agreement between the parties that the results of an examination would be admissible, the probative value of the polygraph is substantially less because the defendant would have no adverse interest at stake in the polygraph." Id. at 1217. Since the Court found that defendants' polygraph evidence was inadmissible under Rule 403, "it is not necessary for the Court to consider the admissibility of such evidence under the standards established by the Supreme Court in Daubert ....

The results of privately-administered polygraph tests were held excludable on the ground that they were not probative in United States v. Marlinga, 2005 U.S. Dist. LEXIS 6364 (E.D. Mich. 2005). Defendants were charged with engaging in campaign contribution improprieties and submitted to privately-administered polygraph examinations which included questions relating to the allegations upon which their indictments were based. Before taking the polygraphs, defendants did not solicit the government's involvement in the examination or an agreement that the results would be presented to the grand jury or admissible at trial. Once the polygraph examinations were completed (with favorable results), defendants moved to compel the government to submit the results to the grand jury and to present the same evidence at trial, and also requested an evidentiary hearing to enable them to demonstrate that the polygraph evidence met federal court standards for admissibility. The district court found that the government could not be compelled to present allegedly exculpatory evidence such as the polygraph results to the grand jury, and held that there was no basis to find that the evidence offered by defendants was substantial evidence which directly negated their alleged guilt. The court further ruled that defendants' polygraph results were not probative and were thus excludable under Rule 403 insofar as defendants had no adverse interest at stake in electing to take the tests.

Most of the courts of appeal that have considered the issue of admissibility of polygraph evidence at the sentencing phase, moreover, have
upheld refusals to admit such evidence. See e.g. United States v. Thomas, 167 F.3d 299, 307-08 (6th Cir. 1996) (affirming exclusion of defendant's polygraph evidence in support of role reduction); United States v. Messina, 131 F.3d 36, 42 (2d Cir. 1997) (defendant's "polygraph evidence ... was unworthy of credit"), cert. denied, 523 U.S. 1088 (1998); United States v. Stein, 127 F.3d 777, 781 (9th Cir. 1997) (defendant's polygraph evidence was "too conclusory to be probative"); cf. United States v. Weekly, 118 F.3d 576, 581 (8th Cir.) (upholding denial of § 5C1.2(5) safety-valve exception because evidence of defendant's deceitfulness other than refusal to take polygraph examination), cert. denied, 522 U.S. 1020 (1997); United States v. Pitz, 2 F.3d 723, 729 (7th Cir. 1993) (no plain error in sentencing court's reliance on witness's polygraph because it was only one factor in court's credibility assessment and court "recognized that polygraph tests are not an entirely reliable indication of veracity"), cert. denied, 511 U.S. 1130 (1994).

XXVII. Local Government Legislative Factfinding

Daubert challenges have been rejected as inappropriate in certain types of governmental litigation in which the governmental entity can make a showing that forcing it to run the Daubert gauntlet with respect to the legislative factfindings and underpinnings for particular legislative matters would be unduly burdensome. For example, in G.M. Enters. v. Town of St. Joseph, 350 F.3d 631 (7th Cir. 2003), the Town adopted an ordinance restricting nude dancing, relying on sixteen studies that showed a relationship between sexually oriented businesses and property values, crime statistics, public health risks, illegal sexual activities such as prostitution, and organized crime. Defendant, a nude dancing parlor, challenged the Town's ordinance under the First Amendment, contending that the Town could not demonstrate a reasonable probability of a causal relationship between nude dancing and deleterious secondary effects unless it presented evidence with sufficient rigor to qualify for admissibility under Daubert. The trial judge upheld the constitutionality of the ordinance and granted summary judgment in favor of the Town. The Seventh Circuit affirmed, holding that under the Supreme Court's First Amendment precedents, municipalities are not required to present empirical data to support their legislative assessment that sexually oriented businesses promote adverse secondary effects. "A requirement of Daubert-quality evidence would impose an unreasonable burden on the legislative process."

XXVIII. Attacking the Reliability of Expert Opinion: Getting the Pavlovian Response from a Challenged Expert

Cross-examination of an expert requires focus. It demands preparation, particularly if the expert is a little bit cocky. For example, if an expert has survived a pretrial Daubert challenge and is proceeding to testify at trial, the cross-examination can be most effective if counsel has prepared to the hilt for the eventuality that the expert, perhaps emboldened by her survival of a pretrial motion in limine, may give an answer that strays from what was anticipated based on her prior deposition testimony, written reports, affidavits or publications. Counsel should be ready to go to the source immediately and show the expert the error of her ways. Delay and fumbling around with a bulky deposition transcript in this process is not a confidence builder for the judge, the jury or the cross-examining counsel, a point underscored in How to Litigate a Land Use Case: Strategies and Trial Tactics 354 (ABA Section of State & Local Government Law, Larry J. Smith, ed., 2000). The authors of the chapter "Trying the Case" provide us with helpful insights of land use litigators when they describe a useful procedure that relies on the most fundamental techniques for impeachment and contradiction on cross-examination:

[Y]our notes or outline should reflect the witness's deposition testimony, by page and line, so that you then may quickly confront the
witness with his or her earlier contradictory statements. This ... telegraphs to the witness that you are prepared, organized, and in control, and that you have the power to damage or destroy his or her credibility. ... If you keep the witness's deposition transcript nearby during each instance you impeach him or her, sooner or later all you have to do is reach for it at the appropriate time, and the witness's response will become Pavlovian. In fact, when the witness pauses to give an answer and you gently place your hand on the top of his or her deposition, you may be pleasantly surprised by the answer the witness quickly concludes, rightly or wrongly, he or she has no other choice but to offer.

Litigation Risks With Dr. Expert

Without the rigorous scrutiny that a Daubert analysis would bring to expert opinion evidence, counsel faced with such evidence coming from an opposing party's expert will face litigation risks that are unacceptable, and the trier of fact will be allowed to base its findings of fact on arbitrary and unprincipled evidence that would make a junior high school librarian blush. Juries may give great deference to the testimony of someone waltzing into a federal courtroom with the appellation "Doctor." As the district court explained in White v. Estelle, 554 F. Supp. 851, 858 (S.D. Tex. 1982), when "a lay opinion is proffered by a witness bearing the title of 'Doctor' its impact on the jury is much greater than if it were not masquerading as something it is not," aff'd. 720 F. 2d. 415 (5th Cir. 1983). As Professor Imwinkelried has observed,

Scientific evidence impresses lay jurors. They tend to assume it is more accurate and objective than lay testimony. A juror who thinks of scientific evidence visualizes instruments capable of amazingly precise measurement, of findings arrived at by dispassionate scientific tests. In short, in the mind of the typical lay juror, a scientific witness has a special aura of credibility.


Similarly, when the term “Expert” is used, the distinct danger exists that no matter how much of a charlatan the so-called expert may be, no matter how hollow the core of his expert opinion may indeed be as revealed on cross-examination, the testimony of Dr. Expert could easily be given great weight by the jury. Under such circumstances, the jury would be at great risk of perceiving that such expert has come into court wearing a mantle of expertise, inevitably enhancing his credibility and, therefore, the impact of his expert testimony.

Self-Proclaimed Experience and Reliability

Daubert helps the federal district court ferret out unreliable, unprincipled and arbitrary expert opinion testimony and concomitantly helps mitigate this high risk of a jury giving Dr. Expert significant credibility and more weight than it deserves. It does this by stripping away the veneer, by pulling back the curtain behind which the Great Oz feverishly manipulates the controls, much as a charlatan expert manipulates the evidence, statements of witnesses, official investigative reports, and facts that do not fit into his preconceived stage set of expert opinions. The faulty, haphazard and arbitrary pick-and-choose methodology of such an expert alone may suffice to justify its exclusion, as may the expert’s attempt to ground his opinion on “experience” and nothing more. See, e.g., United States v. Fredette, 315 F.3d
"a witness 'relying solely or primarily on experience' must 'explain how that experience leads to the conclusion reached, why that experience is a sufficient basis for the opinion, and how that experience is reliably applied to the facts.'); Santa Monica Pictures, LLC v. C.I.R., T.C. Memo. 2005-104, 2005 WL 1111792 (U.S. Tax Ct. 2005)("[A]lthough Mr. Crawford testified that his experience in corporate NOL transactions involves valuations of NOLs, he failed to explain whether he personally makes or reviews, or has any substantial role in making or reviewing, those valuations. He also failed to correlate his valuation methodology to his purported experience in valuing NOLs and to explain whether he makes, reviews, or relies upon valuations similar to the valuation in his expert report. Although Mr. Crawford states that he selected a 98- to 99-percent risk-related discount rate "in the interest of determining a conservative value", he admitted that his selection was inherently subjective and that the value he arrived at reflects a speculative value.")

Conclusory Inference Without Basis or Reasoning

A good example of how the trial court handles such testimony when properly challenged in a Daubert motion can be found in a recent excessive force case, Thomas v. City of Chattanooga, 398 F.3d 426 (6th Cir. 2005). Plaintiffs were husband and wife, and at a time when they were engaged in an apparently violent dispute in their home, an officer called to the scene of what was reported to be a domestic disturbance fired his service revolver at and wounded the husband at a time when the husband had two weapons in his hands and the wife appeared to be in imminent danger. Specifically, the officer fired his weapon to protect the wife from what he reasonably believed to be an imminent threat of serious bodily harm or death. His actions complied with departmental policy, and the shooting was justified, according to the subsequent Internal Affairs Division investigation. Plaintiffs filed a §1983 action in which they sought to impose municipal liability upon the City of Chattanooga's Police Department based upon their claim that the police department had a policy, custom or practice of condoning the use of excessive force against suspects. The City’s summary judgment motion was based primarily on the affidavits of three officers with the Training Division, Internal Affairs Division and Accreditation and Standards for the police department, who stated that there had never been any complaints of excessive force against the officer, that the police department did "not have any policy, custom or practice allowing police officers to use excessive force on any suspect," and that "no policy--making official of the City has ever authorized or condoned any policy or custom of using excessive force." Id. at 430. According to these witnesses, the officer in question received proper training in the use of deadly force, which was only authorized when an officer “clearly believed deadly force was immediately necessary”, and the city did not fail to train its officers due to any "deliberate indifference," nor did it have any policy, custom or practice of condoning the use of unwarranted excessive force.

Plaintiffs’ expert, Davidson, had a lengthy career in criminal justice, law, and education related to police training and operations. He submitted two affidavits in Thomas, the first of which consisted of a two page document in which he stated:

Based on my experience with other cities in cases similar to this one, the number of formal civil cases alleging use of excessive force by police officers filed against the City of Chattanooga indicates that . . . Chattanooga Police Department uniformed officers acted within an informal, unwritten policy, practice, or custom wherein the unlawful use of force--the use of excessive force-- was tolerated. In my experience, this "culture" must necessarily have been known to Chattanooga Police Department... illustrated by the fact that [Crumley] recommended that Officer Abernathy's shooting of Mr. Thomas be "...carried as justified." Id. at 430.
In his second affidavit, the plaintiffs’ expert added that he had reviewed statistical evidence consisting of 45 complaints and civil cover sheets from 45 excessive force suits ranging from a shooting to a broken fingernail filed against the police department since July 1994. While he did not examine details of these suits beyond looking at the complaints, he drew the inference that the police department had a policy, practice, or custom of condoning excessive force based on (1) the fact that the officer was found justified in shooting, (2) the investigative report was prepared in the "customary way," and (3) the IAD officer who prepared the report said she would have decided the case the same way if she had to do it over again. The expert opined that there must have been a policy or custom of condoning excessive force in the police department because there had been past complaints of excessive force against the police department, the officer violated the department’s written “use of force” policy, yet the department deemed his actions justified.

The Sixth Circuit in Thomas agreed with the district court that the plaintiffs’ expert’s inference was conclusory since he never set forth his basis or reasoning behind his opinion, provided no explanation of “how one could evaluate the mere number of complaints in a vacuum to come to a conclusion about the Department's policies,” and failed to present any “data upon which the Court could compare or contrast the number of excessive force complaints made by citizens of Chattanooga with the number of excessive force complaints in similarly-sized cities or in cities with a similarly sized police force.” The Sixth Circuit emphasized that the expert failed to explain how he drew his conclusions from this list of prior complaints against the department, and while he was qualified to assess police operations, his conclusory affidavit based on his experience the mere number of complaints filed against the police department was insufficient to created a genuine issue of material fact:

In this case, appellants believe that because we are dealing with non-scientific testimony, Davidson may rely solely on his experience to explain the conclusion he drew from the number of complaints filed against the Police Department, rather than having to explain to the court why and how he came to those conclusions. An expert may certainly rely on his experience in making conclusions, particularly in this context where an expert is asked to opine about police behavior. ... We need not doubt whether Davidson is qualified to assess police operations. Indeed, Davidson's curriculum vitae suggests that his long career in the fields of criminal justice, the law, and education have all related to police training and operations. However, being an expert does not lessen the burden one has in rebutting a motion for summary judgment. ... [I]n this case, because Davidson's affidavits provide no rationale for his conclusions, appellants are asking that we take their expert's "word for it." We cannot. Davidson himself stated that "there's no brightline or rule" regarding how many complaints would be excessive, suggesting that an expert would need to conduct a more qualitative analysis. However, Davidson did not conduct such an analysis, and instead, in his deposition he merely mentioned a few cases where the courts have let the jury determine whether the municipality had an unwritten illegal policy. Even then, Davidson offered no qualitative analysis of those cases and how they were similar to the present case. Therefore, Davidson's conclusion, that the Police Department must have an unwritten policy of condoning excessive force because of the mere number of complaints previously filed against it, is insufficient to create a genuine issue of material fact on which a jury could reasonably find that such a policy exists. Id. at 431-32.
Uncovering Unwarranted Assumptions of Fact

Sometimes an added ingredient makes the Daubert challenge resemble a confrontation with the Marx Brothers. On these occasions, counsel seeking to challenge the reliability, relevancy and admissibility of an opposing expert's opinion testimony may find that the expert had made clearly unwarranted assumptions of fact when necessary to buttress his opinions, and that he has done so by adopting a methodology whose essential characteristic is that it is based on no sound methodology. The task of counsel moving to exclude such expert evidence is to show that the expert has boot-strapped his opinion with a preordained set of facts not reflected in the record of the case. The expert may have patterned the events in question after a preconceived formula, placing his own "spin" on the facts so as to make the physical evidence fit his predetermined outcome. As the preponderant of such result-oriented expert testimony, the party who employed such an expert has the burden of establishing that such testimony is admissible, that it satisfies the reliability and relevance requirements of the Daubert trilogy, and that those requirements are met by a preponderance of the evidence.

Bear in mind that a plaintiff may not escape summary judgment “in the mere hope that something will turn up at trial,” any more than a nonmovant can rely on ignorance of facts, speculation or suspicion to carry the burden of persuasion under Rule 56. Conaway v. Smith, 853 F.2d 789, 794 (10th Cir. 1988). With this kind of pressure on the plaintiff and with the right hired-gun expert on the other side of a governmental liability case from you as the counsel for a governmental entity or official, your key is preparation: a carefully prepared, thoughtfully presented and systematically organized Daubert motion can persuade the trial judge that this burden cannot be met.

XXIX. Erroneous Exclusion Under Daubert: Adequate and Independent Ground Rule

Daubert rulings by the trial court, even though they may result in erroneous exclusion of medical or other scientific evidence, are not necessarily fatal to the defense on appeal, provided there is an alternate and independent ground for affirmance.

One such near miss was Wroncy v. Oregon Dept. of Transportation, 2004 WL 720222 (9th Cir. 2005), where the plaintiff filed an ADA suit against the state department of transportation, alleging that the highway department’s application of herbicides along the highways aggravated her disabilities of “Multiple Chemical Sensitivities” or MCS, and a form of porphyria called “Dual Variegate Porphyria.” The district court in granting summary judgment for the defendant stated that MCS and porphyria were "essentially identical," and that evidence of MCS was inadmissible under Daubert, and alternatively held that plaintiff had failed to show that a genuine issue of material fact existed as to the causation. The Ninth Circuit found that the record did not “support the district court's treatment of porphyria and MCS as essentially identical,” and that the department of transportation’s expert had described porphyria as a "very rare genetic disorder" and that it was "an established medical illness," in contrast to the district court’s finding that MCS as a disease had yet to gain “widespread acceptance within the medical community.” The Ninth Circuit nonetheless affirmed on the basis that the district court correctly ruled on causation, noting that plaintiff had presented “no evidence, other than her own lay testimony, that she came into contact with ODOT's herbicides or that the herbicides, as opposed to another chemical, triggered her purported reactions. In short, she has not shown that she was or is excluded from the highways due to her disabilities.”
Exclusion of Culturally Stereotyping Testimony

In United States v. Verduzco, 373 F.3d 1022 (9th Cir.), cert. denied, 73 U.S.L.W. 3297 (2004), the defendant admitted smuggling drugs but claimed that he did so under duress. In support of his defense, the defendant proffered expert testimony from a sociologist, who opined that the defendant's reluctance to approach police for help may have stemmed from his socialization in Mexico, where law enforcement authorities are often corrupt. The trial judge excluded this expert testimony as a sanction for pretrial discovery violations, and also based its exclusion on a Rule 403 determination that the expert testimony's tendency to confuse jury would outweigh its probative value, and on Rule 702, since the testimony was unhelpful to the trier of fact, since the defendant had worked and resided in United States for a substantial period of time. The Ninth Circuit affirmed the conviction and upheld the exclusion of the subject expert testimony, holding that while exclusion of the testimony as a discovery sanction was too drastic, the district court did not abuse its discretion in finding that the sociologist's culturally stereotyping testimony would be more prejudicial than probative. Further, the Ninth Circuit held that the trial judge was not required to conduct a Daubert hearing, because it excluded the subject testimony on sufficient alternative grounds. Similarly, valid exclusion of evidence based on Rule 403 can constitute an independent ground for affirmance, rendering consideration of a Daubert analysis and hearing by the lower court moot. See Conti v. Commissioner, 39 F.3d 658, 662 (6th Cir. 1994) and United States v Sherlin, 67 F.3d 1208, 1216 (6th Cir. 1995), cert. den., 516 U.S. 1082 (1996).

XXX. Daubert-Based "Stealth Jurisprudence" and Unpublished Opinions

Appellate judges need a running start at keeping abreast of their caseload. They find some help in the growing practice of not publishing opinions. Roughly forty percent of federal appellate Daubert decisions are unpublished. The current publication rates listed by circuit for Daubert decisions issued since January 1, 2000 appear in Daubert on the Web at http://www.daubertontheweb.com/unpublished.htm:

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<td>Third Circuit</td>
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This low-visibility practice appears questionable in a legal system based largely on common law and stare decisis. One might wonder what rational purpose would be served by withholding 40% of a court's decisions from publication, decisions that construe, interpret and apply the Daubert trilogy, besides reducing the workload of printing presses and saving trees for those few lawyers who still don't utilize computerize legal research – by refusing to publish 40% of the decisions that construe, interpret and apply the Daubert trilogy? Unpublished and therefore uncitable opinions are of little use in resolving legal controversies that may involve virtually identical facts, experts, issues and circumstances. Tough luck, litigator, especially if you have the occasion to win a major case on appeal involving a novel application of
Daubert and find that it is not going to be a published precedential opinion, but that its bones are going to be buried in the unpublished landfill. See generally S. Wasby, Unpublished Court of Appeals Decisions: A Hard Look at the Process, 14 S. Cal. Interdis. L.J. 67,72 (2004) (principal criticisms are "unpublished dispositions create four types of harms: (1) they create inconsistency in case outcomes, (2) they create the potential for "stealth jurisprudence," (3) they may contain sloppy analysis, and (4) people are unsure about their validity."). The best practical suggestion at this point is that counsel should consult the local rules of his or her circuit and request that the opinion be published. Most local rules require such a request to be made very soon after the unpublished opinion has been issued.

XXXI. Conclusion

Daubert motion practice forces the litigants, counsel and trial court in governmental litigation to address threshold issues of admissibility of expert evidence in a way that can terminate litigation at a relatively early stage. It is an evidentiary safety relief valve for those who know how to use it. A well-timed, properly supported and logically presented Daubert motion requires focused effort, early preparation and a thorough grasp of the underpinnings of the field in which the challenged expert is to testify. This in turn requires counsel for the governmental defendant to acquire an understanding of the rudiments, techniques, theories and methodology upon which the opposing expert seeks to express his or her expert opinions. When lawyers scrutinize their own expert's written report and their opponent's for consistency with Daubert, it has been suggested that they stipulate or ask the judge to direct each expert to include in their report a complete description of the methodology used for reaching conclusions, thereby enabling Daubert objections to be more fully developed and argued. T. Hirt, Expert Reports, in The Litigation Manual – Pretrial 486 (ABA Section of Litigation 1999).

Counsel must be able to recognize flaws in the expert's methodology, analytical gaps in the expert's reasoning process, unwarranted leaps of logic that fly in the face of generally accepted principles, and inadequate extrapolation from one field of expertise or specialized knowledge to another. In a chapter entitled "Nine Ways to Cross-Examine an Expert," contained in the latest edition of his classic Trial Notebook (4th ed. 2005) 530-34, Professor Jim McElhaney cautions us to pick only those fights that we know we can win when cross-examining an expert. Included in the list are:

(1) **poke some holes in the expert's field** ("Every field has its flaws and foibles; from DNA to ballistics, from economics to psychiatry. The trick is to use your expert to point out to you the kind of things his field can't do. Then pursue – with a nice light touch – the weaknesses that help your case.")

(2) **attack the witness's facts** ("Experts are professional explainers. Their opinions are no more reliable than the facts they're based on.")

(3) **attack the witness's qualifications** ("There are more frauds and humbugs running around than you realize.")

(4) **poke little holes in the witness's opinion then throw them away** ("Two or three episodes like that at the beginning of your cross-examination tend to be unsettling even for experienced experts who have testified a number of times.")

The Daubert trilogy is still seen by some as inviting a defense challenge to virtually any expert witness a plaintiff seeks to use. It is perceived by many more as placing trial judges in the position they were intended to be: evaluating the admissibility of expert evidence with standards appropriately defined and narrowly tailored to separate valid scientific, technical and specialized methods and techniques from those lacking in empirical support, sound methodology, and generally accepted principles. Timely filing of a
*Daubert* motion in the context of governmental litigation furthers the administration of justice by eliminating junk-science experts from civil suits and marginalizing experts who testify outside their fields of expertise. This can translate to a dramatic reduction in cost and a budget-saving reallocation of manpower and resources of the federal judiciary, local governments and the taxpayers who support them.