WITHIN THIS PAST DECADE, there have been more challenges to the admissibility of expert testimony than ever before. The trigger for this flurry of activity was Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), which has already changed the way many cases involving mental issues are litigated. At this time, a substantial majority of states follow the federal standard. A minority reject Daubert in favor of retaining Frye. Others have their own unique evidentiary standards, while still others have not yet addressed the issue. Because of the differences between the various tests, it is imperative that litigators know which rule applies in their own jurisdiction and how it has been interpreted with respect to mental health testimony. This article will review some of these new developments and offer some of practical advice for the practicing attorney. Since the general trend seems to favor the federal innovations, I shall mostly confine my comments to them.

"RED FLAGS" THAT CAN TRIGGER A DAUBERT CHALLENGE -- The articulation of specific criteria on admissibility of expert testimony has allowed challenges to such testimony not based on the now-clarified standards. Appellate courts now routinely and explicitly opine on such challenges. I also found the commentaries accompanying the new Fed. R. Evid. 702 to be extremely useful in the decision to submit a motion to exclude proffered testimony on the basis of unreliability. These comments and federal case law indicate that the following factors might form the basis of a successful challenge.

Improper Extrapolation

Many experts fall into the trap of extrapolating from one set of data to another. For instance, it is improper to conclude without any further support that a substance causing one harm also causes another harm.

Reliance on Anecdotal Evidence

Opinions based only on an expert's own experience with patients or clinical experience, or on a few published case studies, are generally held inconsistent with the scientific methods and therefore insufficiently reliable after Daubert. Anecdotal evidence is usually derived from insufficient sampling, may not be comparable to the facts of the case at bar, and ignore the base rate of the phenomenon in the general population. "Case reports are not reliable scientific evidence of causation, because they simply describe reported phenomena without comparison to the base rate at which the phenomenon occurs in the general population or in a defined control group; do not isolate and exclude potentially alternative causes; and do not investigate or explain mechanism of causation." Cavallo v. Star Enter, 100 F.3d 1150 (4th Cir. 1996), cert. denied,
Reliance on Temporal Proximity

By relying solely on temporal proximity, the expert fails to consider other possible explanations—not to mention the unexplainable—that a scientist would want to look into before drawing a conclusion. Temporal proximity between exposure and injury can be used as confirmatory data if a link has already been established between the two. In other unusual circumstances, the short time between exposure and injury may be enough to reliably draw a conclusion about causation. For instance, if 50 diners at a restaurant later come down with food poisoning during the night, it is reasonable to infer that the restaurant's food probably contained something unwholesome.

Irrelevance of the Expert's Opinion to the Case

The expert testimony may lack sufficient connection to "fit" the facts of the case. This is especially true if the expert does not know or cannot determine whether there had been specific exposure to an alleged harmful factor. In other words, this lack of fit between the proffered testimony and the specific facts of the case indicates that the testimony is simply irrelevant to the case.

Failure To Consider Other Possible Causes

Before a conclusion on causation can be reliably drawn, the expert must make some reasonable attempt to eliminate some of the most obvious causes. In medicine, this is the performance of a differential diagnosis, and in epidemiology, control for confounding factors. Although the expert is not required to categorically exclude all other possible causes for an injury, the most obvious causes should have been considered and reasonably ruled out. He or she should elaborate how he or she weighs the evidence attached to the probability of remaining possible causes in reaching his conclusion.

Lack of Testing

If the expert has not even tested the hypothesis he or she is testifying to, this is considered an extremely negative factor, especially in product liability cases.

Subjectivity

Daubert emphasized that the scientific method is an objective one. It instructed a district court to assure itself that the expert's hypothesis could be tested by objective standards. This is the essence of what the Supreme Court referred to as scientific validity, also known as falsifiability. It follows that, if an expert's methodology cannot be explained in objective terms, and is not subject to be proven incorrect by objective testing, then the methodology is presumptively unreliable.

Rigor in the Soft Sciences

Fed. R. Evid. 702 recognizes that Daubert must be modified when applied to softer science, such as the social sciences. An expert in the soft science of psychology operates differently from an expert in a hard science such as physics. However, while these softer areas of expertise are less adaptable to falsifiability, they must have achieved some degree of reliability to distinguish them from, say astrology or necromancy. Within this reliable discipline, the expert must show that, in reaching his opinion in a specific case, he or she adhered to the same standards of intellectual rigor that are demanded in his or her professional work. The key here is for a district court to ensure that it is dealing with an expert, not just a hired gun. If there is a well-accepted body of learning and experience in the field, then the expert's testimony to be reliable must be grounded in that learning and experience.

POST-DAUBERT DECISIONS SPECIFIC TO MENTAL ISSUES -- The Daubert progeny has further clarified the proper role of expert witness testimony, specifying helpfulness of the proffered testimony without trespassing on the role of the factfinder, qualification of the proffered expert, a foundation of reliable scientific knowledge, and relevance to the
specific case. The following brief reviews of case law for each issue simply sketch the contours limiting admissibility of expert testimony, the trespass of which resulted in successful challenges.

**Preservation of the Function of the Trier of Fact**

Challenges based on potential usurpation of the province of factfinders have universally been successful. As mentioned in the first section, the courts have consistently preserved the function of the triers of fact on the ultimate issue of witness credibility—probably on underlying public policy grounds. They have barred expert testimony on the ultimate issue of veracity of fact testimony. Besides the consistent denial of lie detector test interpretations (see U.S. v. Scheffer, 523 U.S. 303 (1998), for the latest version), courts also have excluded mental expert testimony on the factual occurrence of past events. For instance, expert opinions reached on the basis of interviews that mentally retarded student plaintiffs had actually been sexually, physically, and emotionally abused have been excluded. See Gier v. Educational Serv. Unit, 66 F.3d 940, (8th Cir. 1995). Psychiatric expert testimony that a plaintiff exhibited poor psychiatric credibility and that her story was incredible was also properly excluded. See Nichols v. American Nat'l Ins. Co., 154 F.3d 875, (8th Cir. 1998). Mental health expert witnesses have also been barred from opining on the ultimate issue in terms of criminal responsibility. These ultimate issues are matters for the triers of fact alone (Fed. R. Evid. 704(b)). Again, in raising a potential insanity defense in an extensive fraud case, psychiatric testimony was limited to testimony about the expert's examination of the defendant, diagnosis, clinical history and defendant's version of events. But the expert could not address how such mental disorder might or might not have affected the defendant's criminal culpability, an ultimate question for the jury. See U.S. v. Bennett, 161 F.3d 171 (3d Cir. 1998), cert. denied, 528 U.S. 819 (1999).

**Helpfulness**

Challenges to testimony could also argue that the proffered evidence is simply not helpful in a specific case. Courts have barred testimony on the ground that it addresses issues not beyond the ken of the fact finder. An expert was not permitted to testify to a defendant's alleged intent to be arrested while robbing a bank in order to get psychiatric help, but only to his mental abnormalities on the day of the incident to show intent. U.S. v. Towns, 19 F. Supp. 2d 67, (W.D.N.Y.1998). On the other hand, exclusion of a psychologist's expert testimony that there had been a practice of suggestibility employed in interviewing four- and five-year old alleged victims of sexual abuse was abuse of discretion since the defense had otherwise fulfilled Daubert's criteria. The expert did not purport to testify that the victims had in fact succumbed to any suggestive aspects of the investigation, only that the investigative means used were consistent with psychological studies that similar techniques operated suggestively on young children. Every condition which the expert attempted to testify to as creating the practice of suggestibility had been amply demonstrated in the psychological literature, and the assumption that the jury could do without the informed testimony minimized nearly 100 years of extensive research in this area of psychology, which is beyond knowledge or experience of the average individual. U.S. v. Rouse, 111 F.3d 561 (8th Cir. 1997), cert. denied, 522 U.S. 905 (1997).

**Qualification of the Expert**

Successful challenges can also be based on the argument that the expert lacks proper qualification for the proffered testimony. In assessing restitution against a child pornography defendant, a district court did not err in considering the opinion of a social worker and treatment coordinator at a long-term psychiatric facility where the victim was treated in reaching its conclusion that defendant was the proximate cause of the victim's hospitalization expenses. U.S. v. Crandon, 173 F.3d 122, (3rd Cir. 1999), cert. denied, 528 U.S. 855 (1999). On the other hand, a social worker was not properly qualified to testify as an expert on the likelihood of traumatic damage in a child witness from testifying in open court in the presence of
the defendant. The record did not reflect that she had any special skill or knowledge generally related to trauma that would have qualified her to render a psychological or psychiatric opinion. U.S. v. Moses, 137 F.3d 894 (6th Cir.1998).

Reliability of Proffered Testimony

At the heart of Daubert is the challenge of expert testimony on the basis of lack of reliability of its methodological foundation. For instance, in a products liability case, a trial court barred psychiatric testimony that ingestion of one tablet Halcion caused psychiatric and behavioral injury because of scientifically unreliable methodology. The expert had not tested her causation opinion despite the fact that her ultimate conclusion could have been tested. Nor did she subject her methodology to scientific scrutiny through peer review. The Spontaneous Reporting System of adverse medical events involving drugs did not verify cause and effect in this case. Although the expert claimed to have performed a differential diagnosis in forming her opinion, she did not eliminate all other possible causes of plaintiff's behavior as required by that method. Haggerty v. Upjohn Co., 950 F. Supp. 1160 (S.D. Fla.1996), aff'd without op., 158 F.3d 588 (11th Cir. 1998). While opining that a trial court did not abuse its discretion in finding that a psychologist was qualified to render vocational rehabilitation assessment of a slip-and-fall plaintiff, an appellate court ruled that it should have conducted a Daubert hearing given the serious doubts regarding his methods and in light of the plaintiff's failure to adduce much evidence validating his methods. Elcock v. Kmart Corp, 233 F.3d 734 (3d Cir. 2000).

Relevance

Motions challenging mental expert testimony have also succeeded on the ground of irrelevance. Psychiatric testimony that an attempted extortion victim had dependent personality disorder was properly excluded since the victim's state of mind was irrelevant to the attempted extortion and the nature of the long-term relationship between the defendant and victim was before the jury. U.S. v. Marsh, 26 F.3d 1496 (9th Cir. 1994). On the other hand, a trial court erred in excluding testimony of six psychiatrists and psychologists in a class action sex discrimination suit since they were well qualified, their evidence was thorough and meticulously presented, the methodology for arriving at an opinion was laid out clearly by each witness, and testimony was relevant to the key question in the damage phase linking the defendants' action and the plaintiffs' claimed emotional injuries. Jenson v. Eveleth Taconite, 130 F.3d 1287 (8th Cir. 1997), cert. denied, 524 U.S. 953 (1998). In the previously cited fraud case, the trial court properly excluded testimony on the defendant's mens rea at the time of the crime. Testimony concerning the defendant's motivation and belief that he was doing God's work was irrelevant to the issue of his criminal culpability. The issue was whether he knew that he was committing false representation. Motivation was not an element of the crime and therefore irrelevant in this case. U.S. v. Bennett, supra.

PROPER PROFFER OF MENTAL EXPERT TESTIMONY Mental health testimony, which is more loosely based on empirical testing than "hard" scientific testimony, presents specific challenges for appellate courts. In this section, I shall limit myself to case law on admissibility of expert testimony about subjects specific to mental issues, namely new syndromes, especially "battered woman syndrome," repressed memory, and voluntariness of confession.

New Syndromal Evidence

Although not generally accepted in the mental health field, evidence about new psychiatric syndromes--diagnoses not found in the Diagnostic and Statistical Manual for Mental Disorders, 4th Edition (DSM-IV-TR)--)can resist challenge when it is helpful to the factfinder in understanding general puzzling behavior or emotional reaction beyond the ken of the layperson. For instance, in a sexual harassment and constructive discharge case, a district court properly admitted testimony of the plaintiff's experts about her psychological symptoms and personality traits, since they did not offer their opinions regarding the plaintiff's truthfulness or defendant's guilt, but instead testified that plaintiff might be an easy victim and that her symptoms were consistent with those of someone who had been sexually assaulted. Martin v. Cavalier Hotel Corp, 48 F.3d 1343 (4th Cir. 1995).

Widespread Skepticism

However, appellate courts have been generally skeptical about such new syndromal evidence. A New York Court of Appeals ruled that testimony about a new scientific entity such as "neonaticide syndrome" proffered in a diminished criminal responsibility defense, required prior hearing establishing its reliability before it could be admitted. State v. Wernick, 674 N.E.2d 322 (N.Y.1996). Likewise, the Maine Supreme Court affirmed a trial court's exclusion of testimony about "adult
children of alcoholics syndrome" given its dubious scientific basis. *State v. MacDonald*, 718 A.2d 195 (Me.1998). In a "chemical sensitivity" case, a trial court properly excluded expert testimony blaming plaintiffs' health problems and alleged injury to their central nervous and respiratory systems on exposure to diesel fumes at work since the expert had not performed any of the tests used to confirm whether patients suffered from chemical sensitivity. Nor did the same court err in excluding psychological testimony that they were suffering from dementia, since she was not an expert in the field of medicine or toxicology. *Summers v. Missouri Pac. R.R. Sys.*, 132 F.3d 599 (10th Cir. 1997).

Courts have generally excluded evidence on "multiple chemical sensitivity" as generally unreliable. See Peter Blanck & Heidi Berven, 1999, *Evidence of Disability after Daubert*, 5 Psyh. Pub. Pol'y & L. 16, for a review of this area. On the other hand, with appropriate safeguards careful clarifying the limits of such testimony about new syndromes, appellate courts have allowed them. For instance, the South Dakota Supreme Court, after carefully applying the *Daubert* standard, allowed testimony about "child sexual abuse accommodation syndrome" in a criminal case. The psychologist testified about the general characteristic behavior of sexually abused children and was careful about over-interpretation, stating that the presence of such behavior neither proved the actual occurrence of sexual abuse nor bolstered the credibility of the child. A serologist and a DNA expert seemed to have corroborated the allegation in that case. *State v. Edelman*, 593 N.W.2d 419 (S.D. 1999).

**Battered Woman Syndrome**

The most notorious of these new syndromes is the "battered woman syndrome" or "raped woman syndrome," based on the "battered child syndrome." Again, within appropriate safeguards about the limits of such testimony, many appellate courts have allowed it. For instance, an expert was properly permitted to offer testimony about the behavior of a household employee victim held in involuntary servitude by a Kuwaiti national. Although the expert stated that her research was with victims of sexual and physical abuse, she explained that the employee's failure to flee the residence was consistent with the behavior of abuse victims in general. This testimony was deemed reasonably likely to assist the jury in understanding the evidence that was somewhat technical and beyond the realm of acquired knowledge normally possessed by lay jurors. *U.S. v. Alzanki*, 54 F.3d 994 (1st Cir. 1995), cert. denied, 516 U.S. 1111 (1996).

The Minnesota Supreme Court allowed but limited testimony about "battered woman syndrome" in an assault and attempted murder trial to rebut a defense attempt to undermine the credibility of the assault victim. The court held that the defense had opened the door to this evidence by attacking the victim's credibility. This ruling allowed the prosecution to call an expert to explain to the jury the victim's former recantation of earlier allegations of abuse. However, the testimony had to be limited to a general description of the syndrome and its characteristics. *State v. Grecinger*, 569 N.W.2d 189 (Minn. 1997). But the Georgia Supreme Court affirmed a lower court's exclusion of expert witness testimony about "battered woman syndrome" as an element of a self-defense claim. Although it theoretically allowed such a defense, the court argued that the type of abuse in the case did not show there was a reasonable belief in the likelihood of imminent serious violence from the abuser. Nor did the defendant's Vietnamese ethnicity constitute any evidence that she culturally believed herself to be in imminent danger as a result of loss of status and disrespect. Therefore, the court also affirmed the lower court's exclusion of expert testimony on cultural influence. *Nguyen v. State*, 520 S.E.2d 907 (Ga. 1999).

**Repressed Memories**

Perhaps the most acute controversy in forensic psychiatry is expert testimony about "repressed memories." Motions challenging such testimony have varying degrees of success depending on the jurisdiction and the prevailing standard of admissibility. In a Massachusetts action alleging sexual abuse 47 years before filing a complaint, evidence of plaintiff's repressed memories was not excluded, because the plaintiff presented sufficient evidence that repressed memory theory had been subject of various tests and had been subjected to peer review and publication. While repressed memories could not be empirically tested and might not be accurate, the theory had obtained general acceptance in the community of clinical psychiatrists. *Shahzade v. Gregory*, 923 F. Supp. 286 (D. Mass. 1996). This case has generated a great deal of scientific controversy and is the main focus of Margaret Hagen's *Whores of the Court*, 236-267 (Regan Books, 1997). Another court also allowed expert testimony, based upon the expert's years of professional experience, about the general behavioral characteristics of child sexual abuse victims, the timing of their reporting, and their recollection of details. *U.S. v. Bighead*, 128 F.3d 1329 (9th Cir. 1997).

A New Hampshire lower court reviewed the admissibility of complainants' testimony based on "repressed memory" in criminal proceedings. It held a hearing on whether the phenomena of memory repression and recovery were reliable and had
gained general acceptance in the psychological community. After hearing from experts on both sides, the court ruled that the state had failed to meet its burden. In one of the most thoughtful opinions on the subject, the Supreme Court of New Hampshire affirmed by applying an explicit Daubert analysis. To the original Daubert criteria, it added for consideration the following factors:

-- Age of the witness at the time the alleged event occurred;

-- The length of time between the event and the recovery of the memory;

-- The presence or absence of objective, verifiable corroborative evidence of the event; and

-- The circumstances attendant to the witness's recovery of the memory.

In the case of recovery in therapy, the court also urged an examination of the therapist and her techniques:

-- Her qualifications;
-- The type of approach used;
-- Past involvement in similar cases;
-- Her beliefs about the linkage between psychological problems and allegations of past sexual abuse; and
-- Her neutrality in therapy.

See State v. Hungerford, 697 A.2d 916 (N.H. 1997). But the Utah Supreme Court affirmed a judgment notwithstanding the verdict in favor of the defendant in a civil case, in which the plaintiff sued an alleged abuser on the basis of recovered repressed childhood memories. The trial judge opined that the techniques used to elicit the repressed memories of abuse were inherently unreliable and, after exclusion of all repressed memory-related evidence and testimony, concluded that there was insufficient evidence to support the jury's verdict. Franklin v. Stevenson, 987 P.2d 22 (Utah 1999). On the other hand, in a split decision, the Arizona Supreme Court vacated a trial court's decision based on the Frye standard to preclude expert testimony on repressed memory. The Court maintained that Frye was the appropriate standard for scientific expert testimony because Daubert's extension in Kumho was usurping the fact finder's prerogative. However, in the case at hand, it held that repressed memory was not based on scientific principles but on clinical experience. Testimony about it did not fall within the purview of the Frye standard governing scientific evidence and was therefore improperly excluded on the basis of that standard. Logerquist v. McVey, 1 P.3d 113 (Ariz. 2000).

Confession

In view of the weight juries give to confessions in criminal cases, defense challenges to the admissibility of such confessions are crucial. Mental health experts have come forward to explain how certain mental disorders make some defendants more susceptible to a false confession. When convictions were obtained without an evidentiary Daubert hearing on such proffered testimony by some district courts, federal appellate courts have reversed them. See U.S. v. Shay, 57 F.3d 126 (1st Cir. 1995), and U.S. v. Hall, 93 F.3d 1337 (7th Cir. 1996). State courts are divided on the issue of admissibility of false-confession expert testimony. In a case revolving around the voluntariness of a confession, the Massachusetts Supreme Judicial Court reversed a conviction of first-degree murder, which had been partially based on the confession of the defendant. The court argued that it was error for the trial court to have excluded without a hearing proffered testimony about the effect of "battered woman syndrome" on the voluntariness of that confession and remanded the case for such a hearing. Commonwealth v. Crawford, 706 N.E.2d 289 (Mass. 1999).

Does Rule 702 Make a Difference?

In less than a decade, Daubert and its progeny have dramatically transformed the discourse about admissibility of expert testimony. Daubert has eliminated most of the outrageous and baseless claims, especially in toxic tort litigation and disputes concerning criminal responsibility. The number of law review articles and books on this subject has exploded. A dialogue
between the judiciary and scientists, most notably Associate Justice Breyer and the AAAS, has flourished. The number of challenges to expert witness testimony has also dramatically increased.

The vast majority of the states follow the Daubert standard. Even in those states that have explicitly rejected its standard, like Arizona, its influence has raised the level of sophistication of the court's analysis. And those states still sitting on the fence between the Frye and Daubert standards have adopted arguments in their opinion about expert witness admissibility in many ways indistinguishable from Daubert analyses, See, e.g., Blum v. Merrell Dow, 705 A.2d 1314 (Pa. Super Crt. 1997), aff'd, 764 A.2d 1 (Pa. 2000).

In terms of verdict results, Fed. R. Evid 702 has eliminated some of the less meritorious claims or defenses. It will not eliminate controversy in the field as the vagaries of case law on repressed memory demonstrate. It does help to clarify the role of the expert and limits her testimony so as not to step into the fact finder's province. Through vigorous challenges and cross-examination, it will allow the law to keep in better step with new developments in science. This is especially true in mental health science as it is slowly shifting to an evidence-based foundation. I suspect that many of the arguments advanced today will be discredited tomorrow and Daubert and its progeny will allow litigation to keep up with these developments.

**Violent Behavior Prediction**

There is one area of social science that seems to be tailor-made for the Daubert criteria but still has not yet greatly affected litigation. It is the general area of prediction in mental issues and especially the prediction of all kinds of violent behavior. New sophisticated statistical techniques, whether based on Bayesian probability or on Receiver Operating Characteristics, have truly revolutionized this field in the past decade. For instance, assume a test can detect with 99 percent accuracy the probability that a person will commit homicide in the next year. If the test were to be used for preventive detention in a city of 100,000 people, what would be the probability that the test correctly identified a potential suspect? Given the low base rate of homicide [about 6 per 100,000], the test would have correctly identified all six future killers. However, it would also have falsely identified 1,000 others due to the one percent inaccuracy in the test. So the probability of a person correctly identified as a potential killer by the test would only have been 6/1,000 or 0.6 percent. This result is predicted by Bayes theorem. See John A. Swets, Robyn Dawes, and John Monahan, *Psychological Science Can Improve Diagnostic Decisions*, 1 Psychological Science in the Public Interest 1 (May 2000) for a good review of these new techniques.

These techniques provide empirical testing methods, known rates of errors, extensive publications in peer reviewed journals and have gained widespread acceptance within the relevant scientific community, as required by Daubert. Yet, clinicians are not yet familiar with them. In the above example, many clinicians I know would have answered 99 percent rather than 0.6 percent. I suspect that, in the future, any clinician allowed to testify on issues of prediction of violence will need to demonstrate a familiarity with these techniques and whether they allow a prediction that reaches the legal standard of proof. At present, challenges to such testimony still focus on procedural violations of criminal defendants' civil rights. A case in point was the recent challenge to the notorious Dr. James Grigson's testimony at sentencing in a capital case. After hearing Dr. Grigson's customary absolute certainty concerning the defendant's future dangerousness, a jury had sentenced the defendant to death. The sentence was challenged on the basis of violations of the Fifth, Sixth, Eighth and 14th Amendments, not on the Daubert standard. Although the Fifth Circuit was aware of Dr. Grigson's reputation and lack of standing in the profession, it opined that his testimony did not violate the due process clause. Fuller v. Johnson, 114 F.3d 491 (5th Cir. 1997), cert. denied, 522 U.S. 963 (1997). Such testimony could be much more easily excluded because of its lack of scientific foundation in a Daubert evidentiary hearing rather than a constitutional, procedural one. I predict that such challenges will become more common in criminal and civil commitment cases involving dangerousness and prediction of violence.

**CONCLUSION** -- Daubert will likely expand to encompass civil cases based on foreseeability which involves probability. I suspect that a future area of intensive research in social science will be the specification of base rates of certain conditions in groups at risk. This knowledge will allow better prediction of future events and prognosis, and allow experts to testify more reliably and validly about future events and foreseeability. Those that do not grow with the field will become vulnerable to a Daubert challenge.
With the increased use of mental expert testimony has been a growth in the number of ways to challenge it. The careful litigator needs to be aware of the tests used in the appropriate jurisdiction, and the sort of circumstances that tend to invite challenges.

-- Criteria for admissibility of expert testimony include the following. (In a minority of jurisdictions that still use some version of the Frye standard the methodology must be sufficiently established to have gained general acceptance in its field):

[ ] Is the testimony's underlying reasoning or methodology scientifically valid and relevant?

[ ] Has it been tested?

[ ] Has it been subjected to peer review and publication?

[ ] What is its know or potential rate of error?

[ ] Does it have standards controlling its operations?

[ ] Did the expert's opinion grow out of independent research or from the litigation?

[ ] Was there an unjustifiable extrapolation from an accepted premise to an unfounded conclusion?

[ ] Has the expert accounted for obvious alternative explanations?
Has the field of expertise reached a sufficient degree of reliability?

Has the same care appropriate to the field been applied?

-- Inquiries under the amended version of Fed. R. Evid. 702 for admissibility of testimony about scientific, technical, or specialized knowledge include whether the testimony:

[ ] Is helpful to the trier of fact;

[ ] Is from a qualified expert (knowledge, skill, experience, training or education);

[ ] Is based upon sufficient facts or data;

[ ] Is the product of reliable principles and methods;

[ ] Is based on principles and methods relevant to the facts of the case; and

[ ] Can be proved by the proponent through a preponderance of the evidence.

-- "Red flags" that can trigger a challenge include:

[ ] Improper extrapolation;

[ ] Reliance on anecdotal evidence;

[ ] Reliance on temporal proximity;

[ ] Lack of relevance ("fit") between opinion and the facts of the case;

[ ] Failure to consider other possible causes;

[ ] Lack of testing; and

[ ] Subjectivity in the methodology.

-- Ways to prevent or defend against a challenge include:

[ ] Carefully limiting proffered testimony to preserve the function of the trier of fact;

[ ] Assuring its helpfulness. It must be beyond the ken of the layman;

[ ] Properly qualifying the expert;

[ ] Assuring its reliability; and

[ ] Assuring its relevance.

-- There are contentious areas of mental expert testimony, and jurisdictions are divided regarding the admissibility of:

[ ] New "syndrome" evidence not within the DSM-IV;

[ ] Battered woman syndrome;

[ ] Repressed memories; and
Confessions.