

Daubert:

What we need to know to use *Daubert* to our advantage

by Matt Powell

Daubert Law is all Federal law. The Fed's 11th Circuit is where you will find all the case law you need regarding how Florida Courts should interpret *Daubert*.

We need to make sure that all of our experts and treating physicians know the law before they are deposed, otherwise the defense will have a *Daubert* challenge and we are stuck with what our expert said.

We will be writing a letter, and or creating a video to help educate our doctors and experts.

Daubert is all about "Principles and Methodology."

Daubert's Standard applies retroactively, see *Perez v. Bell South Telecommunications Inc.*, 138 So.3d 492, 498. And see *Conley v. State*, 129 So.3d 1120, 121 (Fla. 1DCA 2013).

The key *Daubert* cases are: *Daubert v. Merrill Dow Pharms.*, 509 U.S. 579 (1993) which created the standard, and later codified in Fed. R. Evid. 702 (2000) "The focus must be solely on the principles and methodology of the opinions, not on the conclusions that are generated." Abuse of discretions is the standard of review for *Daubert*.

Kumoh Tire Co. V. Carmichael, 526 U.S. 137 (1999) says that *Daubert* applies to all expert testimony admitted under Rule 702, not just scientific testimony. (Doctors opinions regarding causation are subject to *Daubert* scrutiny).

"Trial judges must exercise sound discretion as gatekeepers of expert testimony under *Daubert*. [Defendant], however, would elevate them to the role of St. Peter at the gates of heaven, performing a searching inquiry into the depth of an expert witness' soul - separating the saved from the damned. Such an inquiry would inexorably lead to evaluating witness credibility and weight of the evidence, the ageless role of the jury." *Allison v. McGhan Med. Corp.*, 184 F. 3d 1300 (11th Cir. 1999).

Allison goes on to say that the Gatekeeping role "is not intended to supplant the adversary system or the role of the jury; 'vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof means of attacking shaky but admissible evidence.'"

Trial judges must make an "exacting analysis" of the expert's methodology, but not make "ultimate conclusions as to the persuasiveness of the proffered evidence. *McCorvey v. Baxter Healthcare*, 298 F.3d 1253, 1256 (11th Cir. 2002).

The New Florida Statute 90.702 summarized says expert testimony needs 4 things to be admissible:

- 1) Helpfulness

- 2) Qualifications
- 3) Adequate factual basis; and
- 4) Reliable methodology, reliably applied.

If scientific, technical or other specialized knowledge will assist the trier of fact . . . a witness qualified as an expert by knowledge, skill, experience training, or education may testify about it 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.

When addressing Adequate Factual Basis, the expert's opinion needs to be based on adequate facts to support the opinion. Experts overlooking or ignoring facts can get disqualified. "*Ipse dixit*" is not a good basis. *Ipse Dixit* is saying it is, because "I say so."

Addressing Reliable Methodology, consists of two parts. The methodology itself must be reliable, and the expert must have reliably applied the methodology. To establish methodology and reliability *United Fire & Cas. Co. V. Whirlpool Corp.*, 704 F.3d 1338, 1341 (11th Circ. 2013) sets forth 4 prongs that should be addressed.

- 1) Whether the expert's methodology has been tested or is capable of being tested:
- 2) Whether the theory of technique used by the expert has been subjected to peer review and publication;
- 3) Whether there is a known or potential error rate of the methodology; and
- 4) Whether the technique has been generally accepted in the relevant scientific community.

So how does this really work in real life? Our experts must be able to answer all four of these questions, and be prepared to answer them. When our doctors are deposed, and the defense finishes their questions, we must pro-actively ask our expert to answer these questions so their answers are in the record.

Imagine if the defense asked this question:

- 1) Q. Doctor, tell me what testing there has been regarding the reliability of digital motion X-ray?
A. I am not sure
- 2) Q. Doctor, can you explain your methodology of reaching your diagnosis in this case?
A. Yes, my diagnosis is based upon my education, training, experience, and as a doctor I am telling you that my patient has a permanent injury caused by this crash..."
- 3) Q. Doctor, tell me about the peer review articles you are aware of regarding the digital motion x-ray? (Or causation opinions, or diagnosis findings)
A. I don't have any off the top of my head, but I am sure there are many.
- 4) Q. Doctor, what is the false negative rate of this test? What is the false positive rate of this test? Would you agree that all tests have error rates?
A. There are no errors in my opinions, diagnosis, findings, etc.
- 5) Q. Doctor, are you saying that your technique that you just explained to us under oath and on this records is the same technique that is generally accepted in the

(medical, chiropractic, engineering) community for how you reached your conclusions?

A. Yes.

In the above questions and answers, the court will not allow the doctors opinions because each one of the pre-requisites to admission of the opinion was missed in each answer.

What would be better answers:

- 1) A. X-ray has been done for over 100 years. It has been tested and peer reviewed probably over 5,000 times in various journals and text books used by doctors, radiologists, chiropractors and other health care professionals. Digital Motion X-ray is just part of X-ray, nothing new. (Question 2 answer starts here) DMX is a reliable method to examine bones for things like fractures, tumors and dislocations. It is a standard X-ray based upon over one hundred years of testing, use and has been addresses in thousands of radiology text books and journal articles. The mere fact that we are looking at a standard X-ray that was just selected out of the thousands of X-rays is a technique or methodology of collecting X-rays. In other words, we have only changed the way in which we collect the studies, not the information or reliability of the test. So the reliability of my findings are based upon plain film X-ray studies just like the ones used in every hospital, radiology department or any other facility that uses X-ray to diagnose and treat patients.
- 2) A. Like I said before, DMX uses the same method of data collection as plain film, we just collect more data points by collecting 30 images per second. This method is commonly used in hospitals every day called fluoroscopy, or cini-radiography. This is true digital motion x-ray because we save 30 images per second while the patient moves through specific ranges of motion that are utilized in standard orthopaedic examinations of the cervical spine.
- 3) A. X-ray has been subject to peer review scrutiny for over 100 years and I have a list of reliable publications, articles and texts that are peer reviewed and published in the medical and chiropractic community. Additionally, my diagnosis follows the AMA guidelines to permanent impairments via (cite AMA).
- 4) A. All tests have false positives and false negatives. An X-ray is one of the most reliable tests we have that has a very low incidence of error rate. Errors are commonly caused by over exposure or under exposure of the film, which reduces the quality of the viewable image. However, the error rate in this study due to the quality of the study was eliminated as we can tell by the high quality images we are looking at. Also, other error rates may come in caused by failing to properly mark the correct spots on the study when measuring subluxations. In this case, the error rate appears to be less than half of a millimeter. Upon enlarging the study, and measuring the thickness of the dot used to measure the bones, the dot thickness or line width is less than half of a millimeter. With this error rate in mind we can reliably measure the subluxation of the joint with a very high degree of accuracy, probably less than 2%.

- 5) A. The opinions that I have formed in reviewing this patients digital motion x-ray is based upon the same medical and scientific techniques used through the world by medical doctors, chiropractors, radiologists and other health care professionals to diagnose and treat patients with cervical spine injuries. My opinions are based upon measurable, repeatable scientific techniques.

Here are some suggestions for a Direct Examination of a Treating doctor as it relates to making their differential diagnosis:

- Q. What is the Methodology you followed in reaching your opinions regarding the diagnosis you have made?
- A. I have used the differential diagnosis method to reach my conclusions.
- Q. How long has the differential diagnosis method been used, and has it been tested for reliability and accuracy?
- A. All doctors are trained to use the differential diagnosis, and it works by ruling in certain reasonable conditions, then ruling out certain ones after following a standard protocol. In fact, it is most common to use the S.O.A.P. method which is a process to reach our findings and the S stands for
- Q. Doctor, what is the potential error rate in making a differential diagnosis.
- A. There is an error rate, and it is very low. The factors that make it so reliable are the ability of the physician to take a history, examine the patient, review pertinent tests, etc. The more information the doctor has the better. However, this method is highly reliable even when much of the information is not available. We, as doctors work with what we have. We always want more, which is never entirely possible, but with the circumstances and facts available the error rate for a false or wrong diagnosis or conclusion is very small.
- Q. Has the differential diagnosis method generally accepted in the medical community?
- A. Yes. This is the basis of all medical care in the United States.

Attacks on the Experts Use of the Reliable Methodology:

There is a case where an accident reconstructionist opinion was struck. He attempted to testify that the lights on the truck were not on at the time of the crash. Because the expert never examined the lights, the court found that the expert did not apply the methodology in a reliable manner. The court said that if the expert had examined the lights, then the opinion would be in. So what does this mean? I guess it means that the doctors who are giving opinions about causation better actually look at the films themselves to be extra safe, and not just rely upon the reports.

Treating Doctors reaching a Differential Diagnosis:

Differential diagnosis is the process of considering which of multiple causes could have caused the patient's disease or injury.

"Courts regularly affirm the legitimacy of employing differential diagnostic methodology."
Fed.Jud. Center, Ref. Man Sci. Evid. (3d ed 2011), at 617, n.211.

Here are two footnotes to this book, which I highly recommend reading (mp).

211. It is important to emphasize that the term “differential diagnosis” in a clinical context refers to identifying a set of diseases or illnesses responsible for the patient’s symptoms, while “differential etiology” refers to identifying the causal factors involved in an individual’s disease or illness. For many health conditions, the *cause* of the disease or illness has no relevance to its treatment, and physicians, therefore, do not employ this term or pursue that question. *See* Zandi v. Wyeth a/k/a Wyeth, Inc., No. 27-CV-06-6744, 2007 WL 3224242 (Minn. Dist. Ct. Oct. 15, 2007) (commenting that physicians do not attempt to determine the cause of breast cancer). Thus, the standard differential diagnosis performed by a physician is not to determine the cause of a patient’s disease. *See* John B. Wong et al., Reference Guide on Medical Testimony, in this manual; Edward J. Imwinkelried, *The Admissibility and Legal Sufficiency of Testimony About Differential Diagnosis (Etiology): of Under — and Over — Estimations*, 56 Baylor L. Rev. 391, 402–03 (2004); *see also* Turner v. Iowa Fire Equip. Co., 229 F.3d 1202, 1208 (8th Cir. 2000) (distinguishing between differential diagnosis conducted for the purpose of identifying the disease from which the patient suffers and one attempting to determine the cause of the disease); Creanga v. Jardal, 886 A.2d 633, 639 (N.J. 2005) (“Whereas most physicians use the term to describe the process of determining which of several diseases is causing a patient’s *symptoms*, courts have used the term in a more general sense to describe the process by which causes of the patient’s *condition* are identified.”).

And:

212. Courts regularly affirm the legitimacy of employing differential diagnostic methodology. *See, e.g., In re Ephedra Prods. Liab. Litig.*, 393 F. Supp. 2d 181, 187 (S.D.N.Y. 2005); *Easum v. Miller*, 92 P.3d 794, 802 (Wyo. 2004) (“Most circuits have held that a reliable differential diagnosis satisfies *Daubert* and provides a valid foundation for admitting an expert opinion. The circuits reason that a differential diagnosis is a tested methodology, has been subjected to peer review/publication, does not frequently lead to incorrect results, and is generally accepted in the medical community.” (quoting *Turner v. Iowa Fire Equip. Co.*, 229 F.3d 1202, 1208 (8th Cir. 2000))); *Alder v. Bayer Corp., AGFA Div.*, 61 P.3d 1068, 1084–85 (Utah 2002).

A doctor cannot just say “I did a differential diagnosis.” The doctor must go further and explain

how his differential diagnosis was conducted so that his answer is not “Pure Opinion.”

In *Perez v. Bell South Telecommunications*, 138 So.3d 492, 499 (3DCA 2014) a treating doctors opinion was excluded from the case because the court said his opinion was “a classic example of the common fallacy of assuming causality from temporal sequence.” In other words, if our witness says “well my patient’s neck did not hurt before the crash, but it started right after the crash” and this is the only information offered, then the opinion would not be admissible because it does not meet the *Daubert* standard.

However, if the doctor said:

I examined the patient (pulse, bp, ROM, etc.)

I reviewed the medical records that I possessed

I took a history from the patient

I performed tests (orthopaedic, neurologic, etc.)

I reviewed studies (DMX, MRI, nerve conduction studies, etc.)

and then I used the diagnostic trinity to reach my conclusions about the cause of my patients injury and here it is . . . “

“While a differential diagnosis can provide a valid basis for a medical causation opinion, ‘an expert does not establish the reliability of his techniques or the validity of his conclusions simply by claiming that he performed a differential diagnosis on a patient.’”

Instead, the doctor must explain how his differential diagnosis was reached so the court can decide if the doctor applied the differential diagnosis correctly!

The bottom line is this: temporality alone is not enough. Support your findings by explaining in great detail all the factors and considerations that you used to reach your opinion. It is kind of hard for a doctor to break down their thinking process to explain all the pedantic steps taken to reach an opinion, however it is required to lay the foundation under *Daubert* that the opinion is reliable. Also, as a trial lawyer, I can tell you that the jury really likes this. Even though it is very boring to the doctors and lawyers, the jury will really listen and follow the explanation.

Differential Diagnosis law in Florida under the Federal 11th Circuit requires 2 steps:

Rule In: make a comprehensive list of the possible causes of the disease or injury.

Rule Out: factors which are unlikely to have caused the disease or injury.

Here is an example:

- A. After examining my patient, taking a history, reviewing the tests and other data available to me, I considered the following list of possible causes of Mrs. Smith’s neck pain. This included: cancer of the jaw and neck, tumor, blood pressure, diabetes, stroke, trauma, pre-existing conditions including X, Y, Z... etc. And after considering the myriad of possibilities, I eliminated all of them except, trauma caused by the motor vehicle collision that happened on January 1, 2015. Because when I considered everything as a whole, that she was asymptomatic for neck pain before the impact, that she became symptomatic ____ days after the collision, that the testing ruled out X, Y, Z. That following reliable medical

scientific methods, performing my multiple examinations, reviewing the radiologic studies, measuring the subluxations, my diagnosis is: ligament instability at C3-4 level with a 3.5mm subluxation, herniated disk at C3-4, bulging disk at C4-5, micro muscle trauma to the tissues surrounding the C3-C4 vertebrae, etc.

See *Guinn v. AstraZeneca Pharms. LP*, 602 F.3d 1245 (11th Cir. 2010).

So, does this mean that the expert has to rule in every possible cause to have a valid differential diagnosis? Yes, in one case that is what the court has held. See *Hendrix v. Evenflo, Co. Inc.*, 255 F.R.D. 568 (n.D. Fla. 2009). However other federal courts do not require every cause to be ruled in.

Back to *Guinn v. AstraZeneca Pharms. LP*, 602 F.3d 1245 (11th Cir. 2010), “Differential diagnosis need not rule out all possible alternative causes, but must at least consider other factors that could have been the sole cause of the plaintiff’s injury.” *Id.* at 1253.

How we as lawyers need to use *Daubert* to undercut and eliminate some of the defense opinions:

- Look at the defense experts prior depositions for contradictions and try to undermine their methodology used to make their opinions.
- In depositions, cross examine them regarding learned treatises, and hope that they disagree with what the peer reviewed publications say. This is a huge step in undermining their opinions. The court may grant motions striking their opinions if they can’t say what peer reviewed articles they used to support their findings.
- Ask them if there is some general acceptance in the field regarding the methodology to reach conclusions.
- Suggest to them that they need more information or facts to reach their opinions. And ask them hypothetical questions where you change some facts and see if the changes in the facts will change their opinions?
- Get the defense witness to admit that their opinions lack “helpfulness” if you can. This might be based upon it not being helpful because other witnesses say the same thing. (This concept needs to be explored)

Questions that might be asked of a Defense witness that is offering biomechanical injury causation opinions:

Did you test THIS car?

Did you test my client?

Did you test a car identical to my client’s car?

Did you test a person close to like my client?

If it can be shown that other crashes similar to this one at issue, permanently injured other people, would you agree that your opinion falls apart?

Would you explore the known or potential error rate in your calculations of Delta-V?

Are you aware of any published literature supporting your methodology and theory that by looking at a photo of a car you can tell this damage can cause or not cause an injury?

If so, where is the literature? Where was it published? Who wrote it? Was it peer reviewed, by whom? What methods were used by those authors? Are you aware of the potential error rate for their testing? If so, what was it?

Are you aware of any text book dealing with this topic?

Is your theory generally accepted by experts in the medical field?

What do you base your answer on that your method is generally accepted by medical experts?

Is this taught in medical schools?

Can you point to any other expert in the field of medicine that holds this opinion or a similar one?

Cross Examination technique of a defense witness:

Q. Do you find This book, or article (holding up a book or journal article) Authoritative?

A. No.

Q. So, therefore, I can't ask you if (quote a few lines from the book that is the point you want to make) because you don't find "X, Y, Z) book authoritative?

Okay, thank you.