THE DISTRICT COURT OF APPEAL OF THE STATE OF FLORIDA FIFTH DISTRICT JULY TERM 2005

JILL MARSH,

Appellant,

v. Case No. 5D03-188

ROBERT EARL VALYOU, JR., ET AL.,

Appellee.

Opinion filed December 23, 2005

Appeal from the Circuit Court for Orange County, George A. Sprinkel, IV, Judge.

John T. Stemberger, of Law Offices of John Stemberger, P.A., Orlando, and Shannon L. Akins, of Law Offices of Shannon L. Akins, Orlando, for Appellant.

Joseph Currier Brock, and Steven W. Igou, Orlando, for Appellees, Robert Earl Valyou, Jr., and Deborah A. Valyou.

Jane H. Clark, of Clark & Pardy, P.A., Ocoee, and Elizabeth C. Wheeler, of Elizabeth C. Wheeler, P.A., Orlando, for Appellees, Thomas J. Burke and Donna E. Burke.

E. Peyton Hodges and Robert W. Mixson, of Cameron, Hodges, Coleman, LaPointe & Wright, P.A., Orlando, for Appellee, PV Holding Corp. .

GRIFFIN, J.

Jill Marsh ["Marsh"], the plaintiff below, appeals a summary final judgment entered against her in a personal injury action. Marsh complains that the trial court

erred in refusing to allow her to offer expert testimony that she suffered from fibromyalgia and myofascial pain syndrome caused by trauma. We affirm.

In July 1999, Marsh filed an automobile negligence action against a series of four defendants, alleging that she had sustained injuries arising from four separate and unrelated automobile accidents occurring between August 1995 and January 1998. In Count I, Marsh sued the Valyous based on a collision on August 3, 1995, involving a vehicle driven by Deborah Valyou and owned by her father, Robert Earl Valyou. In Count II, Marsh sued Donna and Thomas Burke ["the Burkes"] based on an accident occurring on April 14, 1996, involving a vehicle driven by Mr. Burke. In Count III, Marsh sued PVC Holding Corp., d/b/a Avis Rent-a-Car ["Avis"] based on a June 20, 1996, accident involving a rental car owned by Avis. In Court IV, Marsh sued Scott David Chilcut based on a fourth accident occurring on January 20, 1998.

Marsh sought to recover damages associated with fibromyalgia, a chronic condition from which she suffered and which she claimed had been caused by the accidents, either individually or in combination. "Fibromyalgia" is a clinical term used to described a chronic "syndrome of widespread pain, a decreased pain threshold, and characteristic symptoms, including non-restorative sleep, fatigue, stiffness, mood disturbance, irritable bowel syndrome, headache, paresthesias, and other less common features." Dr. Frederick Wolfe, *The Fibromyalgia Syndrome: A Consensus Report on Fibromyalgia and Disability,*" 23:3 THE JOURNAL OF RHEUMATOLOGY 534, 534 (1996) ("Consensus Report"). The parties agree that fibromyalgia is a "legitimate, potentially debilitating, and very painful condition." Avis moved to prevent Marsh from presenting

¹ Chilcut is no longer a party to the action.

expert testimony that one or more of the accidents caused Marsh's fibromyalgia, asserting that such evidence failed to meet the standards set forth in *Frye v. United States*, 293 F. 1013 (D. C. Cir. 1923), because it had not yet been generally accepted in the relevant scientific community that trauma could cause fibromyalgia. The Valyous and the Burkes joined in the motion.

Marsh opposed defendants' motion, arguing that: (1) *Frye* does not apply to opinions based on well-established scientific methods, and (2) *Frye* only requires that an expert's method be reliable, not that his conclusion be generally accepted. Marsh argued that *Frye* should not be used to exclude expert testimony that her fibromyalgia was caused by trauma, as these expert opinions were based not on new or novel scientific theories, but on an "examination of the patient, the clinical history of the patient, objective findings such as MRI results and muscle spasms, and the symptomology and diagnoses of fibromyalgia."

The trial court held a hearing on the *Frye* issue on November 6, 2001. Before the court were numerous documents regarding fibromyalgia. These documents showed that fibromyalgia syndrome is not a disease but a clinical construct used to characterize a chronic pain syndrome. In 1990, the American College of Rheumatology ("ACR") published criteria developed by Dr. Frederick Wolfe and others to classify the syndrome for use in a clinical setting. The ACR classification criteria "require generalized musculoskeletal pain and the presence of pain on palpitation at 11 or more of 18 specified tender point sites." *Consensus Report, supra* at 536.

In June 1994, a committee of fibromyalgia syndrome experts was convened by Dr. Wolfe under the auspices of the Physical Medicine Research Foundation at the

University of British Columbia, in Vancouver, Canada, to address issues pertaining to diagnosis, testing, assessment and progress. During a three-day conference, the committee reviewed available data, including reliability and validity of diagnosis and assessment methods, and then approved recommendations concerning the syndrome which were later published in the *Consensus Report*. Among the conclusions voted upon and approved by the committee were the following:

Overall, then, data from the literature are insufficient to indicate whether causal relationships exist between trauma and FM. The absence of evidence, however, does not mean that causality does not exist, rather that appropriate studies have not been performed.

Consensus Report, supra at 535. Regarding "Causality," the "Consensus Report " concluded:

The cause(s) of FM are incompletely understood. There may be events reported by the patient as precipitating and/or aggravating, including physical trauma, emotional trauma, infection, surgery, and emotional or physical stress. In determining the relationship between FM and antecedent events, the physician should consider the patient's opinion, and review the events and pertinent collateral information, including current and past medical and psychosocial history. The chronology of symptoms should be documented.

Consensus Report, supra at 536.

Also before the trial court was a 1997 supplement to the *Consensus Report* by Muhammad B. Yunus, et. al, entitled *"Fibromyalgia Consensus Report: Additional Comments"* ("*Additional Comments"*). The *Additional Comments* had also been published in the JOURNAL OF CLINICAL RHEUMATOLOGY, Vol. 3, No. 6 (Dec. 1997). The authors, who had attended the original conference, offered the following comments on causality and fibromyalgia:

With regard to injury and FMS, the Report emphasizes scientific causality and becomes involved in the jargons of retrodictive and predictive causal propositions. Causal propositions are rarely established with absolute certainty in the realm of medicine. An alternative (and better known model) is the consideration of consistency of association, strength of association, dose-response relationship, and biologic plausibility. . . .

In the context of a legal setting (where the Consensus Report is likely to be used), causality entails only 51% certainty, usually stated in terms of reasonable medical probability. Based on a consistent clinical pattern, case control or descriptive studies, and biological plausibility of central nervous system plasticity, it seems more than 51% likely that trauma does play a causative role in some FMS patients, as agreed by other independent observers.

Additional Comments, supra at p. 324-325. The authors stated that the 1996 Consensus Report had been prepared based on the opinions of a "simple majority" of conference participants and stated that those using the report "should be aware of its controversial nature, its finite time line, and its inherent limitations." *Id.* at p. 326. The Additional Comments were signed only by certain members of the conference.

Plaintiffs also offered an article entitled "Musculoskeletal Injury as a Trigger for Fibromyalgia/Posttraumatic Fibromyalgia" ("Musculoskeletal Injury"), which had been published in Current Rheumatology Reports 2000, Vol. 2 (2000). The article authored by Drs. Dan Buskila and Lily Neumann states at the outset that:

Fibromyalgia (FM) syndrome is a chronic painful muscular disorder of unknown cause. Despite extensive research, the etiology and pathophysiology of FM are still unclear. . . .

Physical and emotional trauma have been reported anecdotally to be precipitating factors in FM, and it is not uncommon for patients with FM to report the onset in relation to an accident or injury. However, evidence that musculoskeletal injury or trauma can cause FM comes from

a few case series or case reports, and it is often insufficient to establish causal relationships.

Musculoskeletal Injury, supra at p. 105. Among the authors' conclusions were:

Traumatic incidents have been suggested as a possible etiologic factor relating to the onset of FM. However, evidence that musculoskeletal injury or trauma can cause FM comes from a few case series or anecdotal case reports. Reviewing the current literature reveals that data are insufficient to indicate whether causal relationships exist between trauma and FM.

ld. at p. 107.

Additionally, the court was asked to consider a report prepared by plaintiff's expert, Dr. Thomas J. Romano, entitled *"Trauma and Fibromyalgia,"* which he was scheduled to deliver on November 14, 2001, to the American College of Rheumatology. In the report, Dr. Romano stated:

There has been some confusion in recent years over whether or not trauma can be caused by fibromyalgia^[2] because of some conclusions reached by a group of doctors at a Conference in Vancouver in June of 1994. I was present at that conference and can attest that nowhere in the conference synopsis did the committee consensus group state that trauma could not be caused by fibromyalgia. What was stated was that at that time, namely in June of 1994, the majority of physicians attending the meeting could not come to the conclusion that truama [sic] could cause fibromyalgia because they did not feel enough studies had been done up to that time. This was the majority opinion, although many doctors in the group disagreed with it. conference, other studies have indeed come out supporting the notion that trauma can cause fibromyalgia. Most noteworthy probably is an article entitled "Increased Rates of Fibromyalgia Following Cervical Spine Injury" by numerous authors, including Frederick Wolfe who was the chairman of the Vancouver Consensus Conference. He also was the

² The report contained in the record may have been an early or rough draft of the report. The proper question is whether trauma can cause fibromyalgia, not whether fibromyalgia causes trauma.

author of a paper that appeared in March of 1997 which concludes on page 451 with the sentence "Thus, trauma may cause FMS (fibromyalgia syndrome), but it does not necessarily cause work disability." These findings have important implications for many industrialized countries.

Dr. Romano also stated that:

Clearly when entities such as the American Academy of Pain Management as well as *numerous* other doctors have formally stated that trauma may cause fibromyalgia, the concept that trauma may cause fibromyalgia is a solid one.

Based on this literature, the arguments of counsel, and additional literature provided by the parties, the trial court granted the defendants' motion in limine. A lengthy written order memorializing the court's ruling on the *Frye* issue was entered by the court on February 5, 2002. The court found that the underlying theory of causation was "new or novel" within the meaning of *Frye* and was plainly subject to the *Frye* test. The court further found that the evidence had to be excluded under *Frye* because the overwhelming consensus of the experts in the field of rheumatology and fibromyalgia was that the evidence and data were insufficient to establish a causal relationship between trauma and fibromyalgia.³

Subsequent to this ruling, it became evident that Marsh's counsel intended to introduce evidence that the accidents caused Marsh to suffer "myofascial pain"

³ In so holding, the court specifically cited *Riccio v. S & T Contractors*, 2001 WL 1334202 (Pa. Commw. Ct. June 22, 2001), which held that evidence of a causal relationship between trauma and fibromyalgia was inadmissible under *Frye*. That opinion addressed most of the medical studies and publications cited by the parties. The court said that in addition to the authorities cited in *Riccio*, it had considered the report which plaintiff's expert, Dr. Romano, intended to deliver in San Francisco on November 14, 2001 entitled "Trauma and Fibromyalgia." It had also considered the 2000 study by Drs. Buskila and Newman, entitled "Muscoskeletal Injury as a Trigger for Fibromyalgia/Posttraumatic Fibromyalgia." The court concluded that none of these

syndrome" ("MPS"). This has been defined as a regional pain syndrome accompanied by trigger points. A trigger point is stated to have characteristics of localized tenderness, presence of a taut band, twitch response, and referred pain on palpitation of a trigger point site. The concept of MPS was largely promoted by Janet G. Travell, M.D. (more prominently known as President Kennedy's personal physician) and her followers. Marsh intended to prove, through opinion testimony of Dr. Romano, that she had MPS caused by an accident.

As it had done with the evidence of fibromyalgia, Avis sought to test the admissibility of Marsh's MPS evidence under *Frye* by filing a motion to exclude the evidence. Avis cited several articles in support of its motion. It also filed an affidavit prepared by Dr. John Rice of Duke University. Dr. Rice, who was board certified in both rheumatology and internal medicine, averred that (1) there is no scientific evidence which suggests that MPS and fibromyalgia syndrome are discrete clinical disorders, distinct from one another, or that they are of known pathophysiology or causation; (2) there are no criteria for even a classification diagnosis of MPS, (3) there has been no scientific study which shows that the hypothetical criteria for MPS had statistical validity; and (4) there are no valid scientific publications establishing a causal relationship between trauma and either MPS or fibromyalgia.

On November 27, 2002, the trial court issued a five-page order granting defendants' second *Frye* motion, which precluded Marsh from introducing evidence or expert testimony of a causal link between Marsh's alleged trauma and MPS. The court

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studies or authorities established a general acceptance among relevant experts of the theory that fibromyalgia could be caused by trauma.

found that "there is even less of a scientific consensus regarding causes of and diagnostic procedures for MPS" than there were for fibromyalgia. The order concluded:

Because the record in this case contains voluminous discovery documents, as well as numerous documents submitted for the two *Frye* hearings, and because the record documents do not contain even the minimum evidence necessary to sustain Plaintiff's burden of proving that the auto accidents proximately caused her claimed injuries, the Court will entertain a motion from Defendants for summary judgment on Plaintiff's entire Complaint.

Thereafter, Marsh's counsel informed the court that Marsh had no claims to present apart from fibromyalgia and MPS; accordingly, the summary final judgment was entered by the court.

Marsh contends on appeal that she should be able to present evidence from her treating physicians and other experts that her fibromyalgia was in fact caused by the trauma she suffered in the accidents. The testimony which Marsh says she should have been permitted to introduce includes: (1) testimony by Dr. James Madison, a board certified orthopedic surgeon who was one of Marsh's treating physicians, that he had diagnosed Marsh with fibromyalgia using "differential diagnosis," which is a process of exclusion to rule out a number of potential causes of an illness and settle on a diagnosis; (2) testimony by Dr. Caryn G. Hasselbring, a treating physician who was double-board certified in rheumatology and internal medicine, that the physician had diagnosed Marsh with accident-induced fibromyalgia syndrome; (3) testimony by Dr. Mark J. Pellegrino, an examining physician double-board certified in physical medicine and rehabilitation, that he has one of the largest fibromyalgia practices in the world in which he sees over 1000 new fibromyalgia patients a year, that he has authored over eleven books on fibromyalgia, that his experience in his practice had been that trauma

causes fibromyalgia roughly sixty percent of the time, and that he believes, based on his examination of the patient and her history, that she is suffering from fibromyalgia caused by her motor vehicle accidents; and (4) testimony by Dr. John Marraccini, a family practitioner who was also the former medical examiner for Palm Beach County, as to physical changes he had seen in victims while performing autopsies, which he said had been caused by trauma and resulted in MPS. Marsh argues that none of this evidence is subject to *Frye*, as she is offering as pure opinion testimony on the part of treating doctors and expert witnesses which is based on personal experience and observations. She also argues that only the basis for an expert's opinions is subject to *Frye* and there is no need to show that the opinions and deductions drawn from those principles would be generally accepted in the scientific community.

Defendants contend that this case clearly involves "novel scientific evidence" which must be shown to be reliable on some basis other than that it is the opinion of the witness who seeks to offer it. They argue that because Marsh is unable to show that the underlying basis of her experts' opinions is generally accepted among fibromyalgia experts, those opinions were properly excluded.

The Florida Supreme Court has reaffirmed that Florida adheres to the test established in *Frye* regarding the admission of new or novel scientific evidence. *Brim v. State*, 695 So. 2d 268, 271 (Fla. 1997). *Frye* requires that evidence or expert testimony which is based on a new or novel scientific principle or discovery is inadmissible unless the proponent of the evidence proves that the underlying scientific principles and methodology are sufficiently established to have gained general acceptance in the relevant scientific community. *Frye* applies only to evidence in the "twilight zone" of

scientific development, "between the experimental and demonstrable stages." *Frye*, 293 F. at 1014. The test is "designed to ensure that a jury will not be misled by experimental scientific methods which may ultimately prove to be unsound." *Davis v. Caterpillar, Inc.*, 787 So. 2d 894 (Fla. 3d DCA 2001). As the court has explained:

The underlying theory for this rule [Frye] is that a courtroom is not a laboratory, and as such it is not the place to conduct scientific experiments. If the scientific community considers a procedure or process unreliable for its own purposes, then the procedure must be considered less reliable for courtroom use.

Stokes v. State, 548 So. 2d 188, 193-194 (Fla. 1989).

The proponent of evidence which is subject to *Frye* bears the burden of establishing by a preponderance of the evidence the general acceptance of the underlying scientific principles and methodology. *See Castillo v. E.I. DuPont De Nemours & Co.*, 854 So. 2d 1264, 1268 (Fla. 2003). The Florida Supreme Court has defined "general acceptance" to mean "acceptance by a clear majority of the members of the relevant scientific community with consideration by the trial court of both the quality and quantity of those opinions." *Hadden v. State*, 690 So. 2d 573, 576 n.2 (Fla. 1997), *citing Brim*, 695 So. 2d at 272. In reviewing *Frye* issues, the court may consider three types of evidence: (1) expert testimony, (2) scientific and legal writings, and (3) judicial opinions. *Castillo*, 854 So. 2d at 1268. The standard of review of a *Frye* issue is de novo. *Id*; *Brim*, 695 So. 2d at 275.

Florida courts have applied the *Frye* test to medical causation testimony which is predicated on a new or novel scientific theory or methodology. *See, e.g., Castillo,* 854 So. 2d at 1264 (expert testimony involving cause of birth defects found properly admissible under *Frye*); *United States Sugar Corp. v. Henson,* 823 So. 2d at 104 (Fla.

2002) (Frye-testing expert testimony that long-term exposure to pesticides caused the plaintiff's phrenic nerve mononeuropathy); Poulin v. Fleming, 782 So. 2d 452, 455 (Fla. 5th DCA 2001) (excluding under Frye expert testimony that infant's schizencephaly was caused by prenatal exposure to radiation); Cerna v. South Florida Bioavailability Clinic, Inc., 815 So. 2d 652 (Fla. 3d DCA 2002) (Frye-testing expert testimony linking drug ingestion to blindness); Kaelbel Wholesale, Inc. v. Soderstrom, 785 So. 2d 539 (Fla. 4th DCA 2001) (expert testimony linking ciguatera poisoning from fish to Guillian-Barre Syndrome excluded under Frye); Berry v. CSX Transp., Inc., 709 So. 2d 552, 556 (Fla. 1st DCA 1998) (admitting under *Frye* expert testimony linking long-term exposure to excessive levels of organic solvents to toxic encephalopathy); see also David v. National R.R. Passenger Corp., 801 So. 2d 223 (Fla. 2d DCA 2001) (case remanded for Frye hearing regarding expert testimony linking repetitive motion to carpal tunnel syndrome). To date, however, the supreme court has seemingly limited *Frye* to cases in which the underlying basis of an expert's opinion as to causation has been based on scientific studies or tests. See, e.g., Castillo, 854 So. 2d at 1264 (expert permitted to testify that he believed that fetal exposure to benomyl would cause the birth defects in question in humans based on rat gavage studies, lab experiments on human and rat cells, and the results of dermal testing done by the manufacturer's own scientist); *United* States Sugar Corp. v. Henson, 787 So. 2d 3, 5 (Fla. 1st DCA 2000)(medical causation testimony based on scientific textbooks and/or case studies describing well-know effects of organophosphates), approved, 823 So. 2d 104 (Fla. 2002).

The Florida Supreme Court has distinguished causation testimony based on "studies and tests" from "pure opinion testimony" based on an "expert's personal experience and training," which the court has indicated is not subject to *Frye. See Hadden*, 690 So. 2d at 573; *Flanagan v. State*, 625 So. 2d 827, 828 (Fla. 1993). According to the court, *Frye* is directed at expert testimony which "relies on some scientific principle or test because such testimony implies infallibility not found in pure opinion testimony. *Flanagan*, 625 So. 2d at 828. In *Hadden*, the Florida Supreme Court defined pure opinion testimony as the testimony of an expert "based solely on the expert's training and experience" and as "testimony personally developed through clinical experience." 690 So. 2d at 579-80.

Flanagan involved the question of whether the trial court properly admitted expert testimony explaining the characteristics of child sex offenders in a prosecution for a sexual battery committed against a nine-year-old child. The Florida Supreme Court found that this kind of "profile" evidence was inadmissible unless it was able to meet the Frye test. The court distinguished between "opinion" testimony which was not subject to the test and "profile" and "syndrome" evidence which would have to meet the Frye test, stating:

As discussed by Judge Ervin below, 586 So.2d at 1109-11, pure opinion testimony, such as an expert's opinion that a defendant is incompetent, does not have to meet Frye, because this type of testimony is based on the expert's personal experience and training. While cloaked with the credibility of the expert, this testimony is analyzed by the jury as it analyzes any other personal opinion or factual testimony by a witness. Profile testimony, on the other hand, by its nature necessarily relies on some scientific principle or test, which implies an infallibility not found in pure opinion testimony. The jury will naturally assume that the scientific principles underlying the expert's conclusion are valid. Accordingly, this type of testimony must meet the Frye test, designed to ensure that the jury will not be misled by experimental scientific methods which may ultimately prove to be unsound. See Stokes, 548 So.2d at 193-94 ("[A]

courtroom is not a laboratory, and as such it is not the place to conduct scientific experiments. If the scientific community considers a procedure or process unreliable for its own purposes, then the procedure must be considered less reliable for courtroom use.").

Id. at 828.

In *Hadden*, the Supreme Court of Florida considered whether *Frye* was applicable to testimony by a qualified psychologist that the alleged victim in a child sexual abuse case was exhibiting symptoms consistent with those of a child who had been sexually abused. The First District Court held that this type of testimony was exempt from *Frye* because it was opinion evidence based on expert's training, experience, and observation, rather than a "syndrome" or "profile" of abuse victims. However, the supreme court found that the evidence had to be subjected to a *Frye* analysis. 690 So. 2d at 575. In finding that the testimony was not "pure opinion" testimony to which *Frye* was inapplicable, the court stated:

We did point out in *Flanagan* that the *Frye* standard for admissibility of scientific evidence is not applicable to an expert's pure opinion testimony which is based solely on the expert's training and experience. See 625 So.2d at 828. While an expert's pure opinion testimony comes cloaked with the expert's credibility, the jury can evaluate this testimony in the same way that it evaluates other opinion or factual testimony. Id. When determining the admissibility of this kind of expert-opinion testimony which is personally developed through clinical experience, the trial court must determine admissibility on the qualifications of the expert and the applicable provisions of the evidence code. We differentiate pure opinion testimony based upon clinical experience from profile and syndrome evidence because profile and syndrome evidence rely on conclusions based upon studies and tests. Further, we find that profile or syndrome evidence is not made admissible by combining such evidence with pure opinion testimony because such a combination is not pure opinion evidence based solely upon the expert's clinical experience.

Id. at 579-580. The court further held that a psychologist's opinion that a child was exhibiting symptoms consistent with what has come to be known as "child sexual abuse accommodation syndrome" was inadmissible under *Frye*, as the syndrome has not been proven by a preponderance of scientific evidence to be generally accepted by a majority of experts in psychology. *Id. See also Holy Cross Hosp., Inc. v. Marrone*, 816 So. 2d 1113, 1117 (Fla. 4th DCA 2001).

This language in cases such as *Flanagan* and *Hadden* indicating that *Frye* is inapplicable to "pure opinion" evidence has apparently led the only Florida court to consider the issue to hold that expert testimony that a patient's fibromyalgia was caused by trauma is pure opinion testimony that is admissible without regard to *Frye*, where that opinion is based solely on the expert's clinical experience, training and an examination of the plaintiff. *See State Farm Mutual Auto. Ins. Co. v. Johnson*, 880 So. 2d 721 (Fla. 2d DCA 2004).

In *Johnson*, which was issued after the trial court below rendered its decision, the Second District held that *Frye* did not apply to expert testimony linking fibromyalgia to an automobile accident. The plaintiff in *Johnson* had been rear-ended by an uninsured driver. After the accident, she developed debilitating symptoms which were ultimately diagnosed as fibromyalgia. Prior to trial, State Farm sought to exclude evidence that the plaintiff's fibromyalgia had been caused by the accident as none of her experts' opinions were generally accepted by the scientific community. The court noted that the cause (etiology) and the disease process (pathogenesis) of fibromyalgia were unknown, but found that expert opinion testimony was nevertheless admissible to show that the accident was the legal cause of the plaintiff's fibromyalgia. *Id.* at 722. The court

reasoned that *Frye* was inapplicable because the experts in the case based their opinions on "their clinical experience, [the plaintiff's medical] history, and the recognized relationship or association between trauma and the onset of fibromyalgia." *Id.* at 723. The court also rejected the argument that the use of the method of differential diagnosis required the exclusion of their opinions, explaining that this was a technique which had "widespread acceptance in the medical community." *Id.* The court concluded:

Mrs. Johnson's experts did not base their opinions on a new or novel scientific test or procedure, and State Farm did not challenge the principles and methodologies they did rely on. Instead, State Farm challenged the opinions reached by the experts. But "Frye does not apply to 'pure opinion testimony' based solely on the expert's personal experience and training." Henson, 787 So. 2d at 14 n. 10. As the supreme court explained, "the opinion of the testifying expert need not be generally accepted as well. Otherwise, the utility of expert testimony would be entirely erased, and 'opinion' testimony would not be opinion at all—it would simply be the recitation of recognized scientific principles to the fact finder." Henson, 823 So. 2d at 100.

Id. As far as we can determine, *Johnson* is the only reported decision in the United States allowing evidence linking fibromyalgia to trauma under *Frye*.

Overwhelmingly, the courts that have considered the issue under *Frye* or under *Daubert v. Merrell Dow Pharmaceuticals Inc.*, 509 U. S. 579 (1993)⁴ have held that

⁴ Some courts have admitted evidence linking fibromyalgia with trauma under *Daubert but* these cases are of little value here, since the *Daubert* test is different and generally considered to be more liberal than *Frye*. In *Alder v. Bayer Corp., AGFA Div.,* 61 P.3d 1068 (Utah 2002), the court held that evidence that the plaintiffs suffered from fibromyalgia as result of the negligent installation and servicing of x-ray machine should have been admitted under *Daubert*. It found that this evidence admissible where the expert "based his opinion on a range of factors, including care and treatment of the plaintiffs, medical histories as related by them and derived from medical and other reports, pathological studies, the expert's own training and experience, review of the relevant product safety specifications, and scientific and medical treatises." *Id.* at 1083. Likewise, in *Reichert v. Phipps*, 84 P.3d 353 (Wyo. 2004), the Wyoming Supreme Court

causative evidence linking trauma to fibromyalgia is inadmissible because of the plaintiff's inability to demonstrate a general acceptance in the relevant scientific community of a causative link between the two. See Vargas v. Lee, 317 F.3d 498 (5th Cir. 2003) (evidence linking injuries suffered in automobile accident with fibromyalgia inadmissible under Daubert because not sufficiently reliable); Allison v. McGhan Medical Corp., 184 F.3d 1300, 1319-22 (11th Cir. 1999) (expert testimony that breast implants exacerbated plaintiff's fibromyalgia excluded under Daubert); Black v. Food Lion Inc., 171 F.3d 308 (5th Cir. 1999) (expert testimony linking trauma to fibromyalgia excluded under federal Daubert standard); Wynacht v. Beckman Instruments, Inc., 113 F. Supp. 2d 1205 (E.D. Tenn. 2000) (expert testimony that the chemical spill at laboratory caused plaintiff's fibromyalgia excluded under Daubert); Gross v. King David Bistro, Inc., 83 F. Supp. 2d 597 (D. Md. 2000) (expert testimony that infection from foodborne pathogen caused fibromyalgia inadmissible under Daubert); see also Young v. Hickory Business Furniture, 538 S.E. 2d 912 (N.C. 2000)(expert testimony attempting to link fibromyalgia to back injury suffered at work was too speculative for admission). The same result was reached in a number of unreported decisions, 5 including Riccio v. S &

held that expert testimony concerning the cause of plaintiff's fibromyalgia was admissible under *Daubert* because differential diagnosis is an accepted method of diagnosing fibromyalgia. The court further noted that since "some medical experts

believe that physical trauma can cause fibromyalgia," a proposed opinion linking fibromyalgia to trauma could not be considered to be new or novel either in "approach

or conclusion." Id. at 364.

⁵ See Bushore v. Dow Corning-Wright Corp., 1999 WL 1116920 (M.D. Fla. Nov. 15, 1999) (expert testimony that breast implants caused plaintiff's fibromyalgia excluded under Daubert); Minner v. American Mortgage & Guar. Co., 791 A.2d 826 (Del. Supr. Ct. 2000) (expert testimony that "sick building" caused plaintiff's fibromyalgia excluded under Daubert); Hultberg v. Wal-Mart Stores, Inc., 1999 WL 244030 (E.D. La. Apr. 22, 1999) (testimony that slip-and-fall caused fibromyalgia unreliable under Daubert);

T Contractors, 2001 WL 1334202 (Pa. Commw. Ct. June 22, 2001)(expert testimony linking trauma to fibromyalgia excluded under Pennsylvania *Frye* standard). testimony has been excluded even where the experts are treating experts who have based their opinions of general causation on the care and treatment of the plaintiff, the medical history the patient related, and the doctor's own clinical experience.

In *Riccio*, an unreported decision which nevertheless was heavily relied on by the trial court in this case, the court applied a Frye analysis to determine the admissibility of expert testimony that trauma suffered by the plaintiff caused her fibromyalgia. The plaintiff in *Riccio* had been injured after an elevated wooden deck had collapsed during a social event. The plaintiff alleged that these injuries either caused the onset or aggravation of the fibromyalgia syndrome from which she suffered. The trial court reviewed at length much of the medical literature supplied by the parties and concluded it was insufficient to demonstrate a general acceptance in the medical community of a causative relationship between trauma and fibromyalgia. The court concluded:

> In sum, none of the authorities presented by the Plaintiff has the effect of refuting those marshaled by the Defendants and persuasively establishing the absence of a consensus in the relevant scientific community as to the cause of fibromyalgia syndrome generally or a fortiori the particular causal role of trauma in the onset or development of fibromyalgia. Under Frye/Topa, the existence of such a consensus is a necessary precondition to admissibility of expert evidence that Plaintiff's trauma following the deck collapse caused her fibromyalgia.

2001 WL 1334202 at *10 (footnote omitted).

Schofield v. Laboscam, Inc., 2002 WL 1335867 (Me. June 6, 2002) (evidence that automobile accident caused plaintiff's fibromyalgia excluded as unreliable under Daubert); Jones v. Conrad, 2001 WL 1001083 (Ohio Ct. App. Sept. 4, 2001) (expert testimony linking trauma to fibromyalgia excluded under Ohio Daubert standard).

Riccio relied on Black v. Food Lion, Inc., one of the leading federal decisions on the issue of the admissibility of evidence regarding fibromyalgia under Daubert. The plaintiff in Black v. Food Lion was injured in a slip and fall accident in a grocery store which she claimed caused her to develop fibromyalgia. She was awarded \$300,000 in a non-jury trial after a magistrate admitted causation testimony by a treating physician, Dr. Reyna, that plaintiff's fibromyalgia had been caused by her fall. Food Lion appealed, arguing that the causation evidence had been improperly admitted under Daubert. The Fifth Circuit Court of Appeals agreed that the evidence should not have been admitted, initially explaining that:

While the medical profession has made significant advances in the diagnosis and treatment of fibromyalgia, experts have recognized that the evidence that trauma actually causes fibromyalgia is "insufficient to establish causal relationships." [Citing the Consensus Report]. The [Consensus Report] states,

Overall . . . data from the literature are insufficient to indicate whether causal relationships exist between trauma and [fibromyalgia]. The absence of evidence, however, does not mean that causality does not exist, rather that appropriate studies have not been performed.

Id. at 535. At least one other commentator has also recognized the severe difficulties associated with identifying the cause of a given patient's fibromyalgia. See Geoffrey Littlejohn, Medico-Legal Aspects of Fibrositis Syndrome, 16 Journal of Rheumatology 169, 171-172 (Supp.1989) ("[T]here is no scientific evidence to suggest that the injury itself results in the pathophysiology of fibrositis syndrome.").

Black, 171 F.3d at 312-313. The court seemingly rejected the argument that the evidence was admissible as opinion testimony by a treating physician, explaining:

[The magistrate judge read the [Consensus Report on Fibromyalgia] to approve "an accepted protocol in rendering an opinion in terms of reasonable medical probability." He then found that [the treating physician] followed this protocol by (a) taking a medical history for [the plaintiff], (b) ruling out prior or subsequent "causes" of fibromyalgia, (c) performing or reviewing physical tests [which all turned up negative], and (d) deducing that the Food Lion fall was the only possible remaining cause of fibromyalgia that appeared nine months later.

This analysis amounts to saying that because [the treating physician] thought she had eliminated other possible causes of fibromyalgia, even though she does not know the real "cause", it had to be the fall at Food Lion. This is not an exercise in scientific logic but in the fallacy of post-hoc propter-hoc reasoning, which is as unacceptable in science as in law. By the same "logic," [the treating physician] could have concluded that if [the plaintiff] had gone on a trip to Disney World and been jostled in a ride, that event could have contributed to the onset of fibromyalgia. See, e.g. Allen v. Pennsylvania Eng'g Corp., 102 F .3d 194, 195-96 (5th Cir.1996) (expert evidence suggesting connection between exposure to ethylene oxide and brain cancer insufficient under Daubert).

The court's task was to determine whether [the treating physician]'s methodology tied the fall at Food Lion by some specific train of medical evidence to [the plaintiff]'s development of fibromyalgia. No one doubts the utility of medical histories in general or the process by which doctors rule out some known causes of disease in order to finalize a diagnosis. But such general rules must, under Daubert, Kumho Tire [Co., Ltd. V. Carmichael, 526 U.S. 137 (1999)] and Moore [v. Ashland Chemical, 151 F.3d 269 (5th Cir.1998) (en banc)], be applied fact-specifically in each The underlying predicates of any cause-and-effect medical testimony are that medical science understands the physiological process by which a particular disease or syndrome develops and knows what factors cause the process to occur. Based on such predicate knowledge, it may then be possible to fasten legal liability for a person's disease or injury.

In this case, neither [the treating physician] nor medical science knows the exact process that results in

fibromyalgia or the factors that trigger the process. Absent these critical scientific predicates, for which there is no proof in the record, no scientifically reliable conclusion on causation can be drawn. [The treating physician]'s use of a general methodology cannot vindicate a conclusion for which there is non-underlying medical support.

Id. at 313-314.

In *Vargas*, the Fifth Circuit recently reviewed advances in fibromyalgia research to determine whether it should adhere to the holding in *Black v. Food Lion*. The plaintiff in *Vargas* had been permitted to introduce expert testimony that trauma from an automobile accident had caused her fibromyalgia. In reaffirming *Black v. Food Lion* and holding that this evidence was not sufficiently reliable to have been permitted, the court stated:

The question now before us is whether scientific understanding of fibromyalgia syndrome has progressed sufficiently since our decision in Black to permit the admission of Dr. Gaber's testimony. Based on the evidence in the record, we conclude that it has not. In support of Dr. Gaber's testimony, the plaintiff produced only two studies, neither of which indicates that medical science has determined with any degree of reliability that trauma causes fibromyalgia. Indeed, the more recent of the two studies--a survey concluding that some groups of Canadian physicians were more likely than others to accept a diagnosis of fibromyalgia following a patient's involvement in a car accident--expressly disavowed this conclusion. See Kevin P. White, et al., Perspectives on Posttraumatic Fibromyalgia: A Random Survey of Canadian General Practitioners, Orthopedists, Physiatrists, and Rheumatologists, 27:3 J. OF RHEUMATOLOGY 790, 794 (2000) ("White Study") ("We emphasize . . . that our study was merely a survey of physician opinions about the association between trauma and [fibromyalgia]; whether these opinions are valid needs to be determined by further study within cohorts of individuals with [fibromyalgia]. To date, the arguments both for and against a causal role of trauma in [fibromyalgia] are weak.").

The second of the studies presented by plaintiff examined the incidence of fibromyalgia syndrome in a group of Israeli patients who had suffered injuries to the neck and the lower extremities. See Dan Buskila, et al., Increased Rates of Fibromyalgia Following Cervical Spine Injury, 40:3 ARTHRITIS & RHEUMATISM 446, 446 (1997) ("Buskila Study") (concluding that "[fibromyalgia syndrome] was 13 times more frequent following neck injury than following lower extremity injury"). Although the Buskila Study stated that "trauma may cause [fibromyalgia syndrome]," it also acknowledged that "[t]he present data in the literature are insufficient to indicate whether causal relationships exist between trauma and [fibromyalgia]" and called for further studies "addressing the issue of trauma (especially, neck trauma) and [fibromyalgia]." *Id.* at 451; see also White Study at 790-91 (stating that further studies are required to verify the Buskila Study's statement that trauma may cause fibromyalgia). These studies only bolster our conclusion in Black that expert testimony on the causation of fibromyalgia syndrome by trauma is not sufficiently reliable to be admitted under Rule 702.

The district court also relied upon Dr. Gaber's testimony during the *Daubert* hearing that a high percentage of his fibromyalgia patients stated that their symptoms appeared following a traumatic injury. This observation, however, is not sufficient to demonstrate the reliability of Dr. Gaber's theory that fibromyalgia is caused by trauma, particularly in light of the lack of scientific support for that conclusion.

Because nothing in the record alters the outcome reached in *Black*, we conclude that the admission of Dr. Gaber's testimony was an abuse of discretion. We do not, however, purport to hold that trauma does not cause fibromyalgia syndrome or that the admission of expert testimony on that subject is permanently foreclosed. Medical science may someday determine with sufficient reliability that such a causal relationship exists. As the Supreme Court recognized in *Daubert:* "[I]n practice, a gatekeeping role for the judge, no matter how flexible, inevitably on occasion will prevent the jury from learning of authentic insights and innovations. That, nevertheless, is the balance that is struck by Rules of Evidence designed not for the exhaustive search for cosmic understanding but for the

particularized resolution of legal disputes." 509 U.S. at 597, 113 S.Ct. 2786 (footnote omitted).

317 F.3d at 501-503 (footnotes omitted). We find these decisions to be convincing and the weight of authority compelling.

Johnson admitted this type of evidence as pure opinion testimony "based solely on the expert's training and experience" and as "testimony personally developed through clinical experience." See Hadden, 690 So. 2d at 579-80. However, we think the view that expert opinion testimony regarding the cause of a plaintiff's fibromyalgia is "pure opinion testimony" misapprehends the nature of the "pure opinion testimony" exempt from Frye. An expert's opinion that a defendant is a schizophrenic is pure opinion testimony, as it is based on a conclusion drawn by the expert from clinical experience without the need for making any underlying assumptions. An expert is taught the symptoms of this disease and, based on his training and experience and his examination of the defendant, is permitted to testify that the defendant has the disease. Likewise, an expert would be permitted to testify that, based on his training and experience, a plaintiff suffers from fibromyalgia.

This "pure opinion" testimony where the experts were being asked to testify that the plaintiff's fibromyalgia was caused by trauma requires, however, an underlying scientific assumption – that trauma can cause fibromyalgia – which is not involved in pure opinion testimony cases. The underlying scientific principle (sometimes referred to as the issue of "general causation") would appear to be subject to the tests established

in *Frye* and/or *Daubert*. This type of opinion testimony also implies the infallibility of the basis of the opinion.⁶

To us it is counterintuitive to permit an expert to ignore scientific literature accepted by the general scientific community in favor of the expert's personal experience to reach a conclusion not generally recognized in the scientific community and then allow testimony about that conclusion on the basis that it is "pure opinion." Dr. Hasselbring, for example, who is board certified in rheumatology, testified that she was not aware of the *Consensus Report* or any of the other literature cited by the parties. To date, the relevant authorities have held that anecdotal evidence or clinical experience is insufficient to establish a (general) causal connection between trauma and fibromyalgia without further testing. Epidemiological studies are not always required to show general acceptance in the scientific community, see *Castillo*, 854 So. 2d at 1270; *Henson*, 823 So. 2d a 104, but in this case the experts have agreed that the studies are necessary before a connection can be recognized. The trial court correctly decided this issue.

Similarly, the trial court did not err in concluding that "there is even less of a scientific consensus regarding causes of and diagnostic procedures for MPS" than there was for fibromyalgia. The evidence presented to the trial court shows that there is a substantial body of opinion among rheumatology experts that MPS is merely a form of fibromyalgia syndrome. Even plaintiff's expert, Dr. Pellegrino, agreed with this statement. Additionally, the materials submitted to the trial court showed that the diagnostic criteria for MPS were developed by Drs. Travell and Simons, but subsequent

⁶ Several of Florida's District Courts of Appeal, including this court, appeared to have applied *Frye* in these circumstances, without specifically acknowledging or discussing the issue. *See, e.g., Poulin,* 782 So. 2d at 455; *Kaelbel,* 785 So. 2d at 539.

studies have found these criteria unreliable and invalid. Marsh's expert, Dr. Thomas Romano, who diagnosed Marsh as having "multi-regional myofascial pain syndrome," admits this is a term he has coined which does not appear in the medical literature. Because it is clear that there is no general acceptance in the scientific community regarding even the existence of MPS apart from fibromyalgia, let alone the criteria used for its diagnosis and the relationship between the disease and trauma, this evidence was properly excluded.

Marsh finally argues that this is an "impact" case to which the *Frye* test does not apply. She explains that the use of the word "impact" was coined by the court in Cerna, 815 So. 2d 652, to describe the result reached by the Fourth District in Florida Power & Light Co. v. Tursi, 729 So. 2d 995 (Fla. 4th DCA 1999). Tursi was a personal injury action in which the plaintiff sought to recover damages from Florida Power and Light ("FPL") after an electrical transformer on FP & L's utility pole leaked liquid containing a harmful toxin onto plaintiff, who happened to be standing under it. Plaintiff looked up when he felt the liquid on him, and it went into his eye. The plaintiff later developed skin problems from the toxin and filed suit. When he developed a cataract in the injured eye, he added that damage claim to his lawsuit. At trial, an ophthalmologist was permitted to testify that the cataract was caused by the transformer fluid. On appeal, the court determined that this evidence had been properly admitted, as the ophthalmologist's testimony was opinion evidence not subject to Frye, but was more in the nature of an orthopedist's testimony that a neck injury, which did not manifest itself with symptoms until four years after a rear-end collision, was caused by the accident. The court said

that this latter type of evidence was admissible without reference to *Frye*. The *Tursi* court explained:

[1] The ophthalmologist, who has treated thousands of cataract patients, testified that there are many causes of cataracts, including aging, congenital, x-rays, radiation, exposure to chemicals, and other trauma. He testified that chemical agents can cause cataracts, and that, depending on the concentration, the cataracts can take from weeks to years to develop. He was able to rule out a number of other causes of cataracts, such as exposure to sunlight, because of the fact that plaintiff only had the cataract in one eye. He testified based on his knowledge and experience that, considering the relatively young age (60) of the plaintiff, the cataract was, within a reasonable medical certainty, caused by the transformer liquid.

FP & L loses sight of the forest for the trees when it focuses on the narrow issue of whether PCB's can cause cataracts, rather than the broader issue of whether this type of trauma could have ultimately resulted in a cataract. Unlike the cases applying the *Frye* test relied on by FP & L, this case involves one incident of trauma, an immediate injury, and a more serious injury developing four years later, at the site of the trauma. The ophthalmologist's opinion on causation was not based on "novel scientific evidence," *Hadden v. State*, 690 So.2d 573, 578 (Fla. 1997), but rather his experience and training. It was no more novel than an orthopedist testifying that a neck injury, which did not manifest itself with symptoms until four years after a rearend collision, was caused by the accident. The trial court did not err in allowing him to testify.

729 So. 2d at 996-997 (footnotes omitted).

Cerna involved a plaintiff who claimed that he had become legally blind after ingesting two pharmaceuticals while participating in a study sponsored by Pfizer. Defendants argued on appeal that testimony by an ophthalmologist that the plaintiff's blindness had been caused by the drugs should have been excluded because of the failure to comply with *Frye*. In *Cerna*, in distinguishing *Tursi*, the court explained that:

Unlike *Tursi*, this is not an impact case. Here Cerna orally ingested pharmaceutical drugs never previously linked to Cerna's apparent illness. In pharmaceutical and chemical ingestion cases, Florida courts uniformly test a proposed expert's opinion under *Frye. See E.I. DuPont De Nemours & Co. v. Castillo*, 748 So.2d 1108 (Fla. 3d DCA 2000) *review granted* (Aug. 31, 2000); *Berry v. CSX Transp., Inc.*, 709 So.2d 552 (Fla. 1st DCA 1998).

815 So. 2d at 655. The *Cerna* court ultimately held that the ophthalmologist's opinion testimony should have been excluded because the scientific evidence failed to show general acceptance of the scientific theories advanced by the plaintiff.

Marsh argues that:

In the case at bar, appellant's injuries began immediately after the first impact and became progressively worse through each of the four automobile collisions. Appellant would submit, therefore, that the *Frye* standard does not apply in the instant "impact" case.

Whatever the merit of the *Tursi* decision, this case is more like *Cerna* than *Tursi*. In this case, no scientifically recognized connection between trauma and fibromyalgia exists. The testimony was properly excluded.

For the foregoing reasons, we affirm the appealed orders and certify conflict with State Farm Mutual Auto Ins. Co. v. Johnson, 880 So. 2d 721 (Fla. 2d DCA 2004).

AFFIRMED.

PLEUS, C.J. and ORFINGER, J., concur.