UNREPORTED

IN THE COURT OF SPECIAL APPEALS

OF MARYLAND

No. 341

September Term, 2016

PRINCE GEORGE'S COUNTY BOARD OF EDUCATION

v.

ALFORD MUNDY

Nazarian,
Leahy,
Friedman,

JJ.

Opinion by Leahy, J.

Filed: March 30, 2017

In March 2013, Alford Mundy ("Appellee") fell and injured his knee. After filing a successful claim with the Maryland Workers' Compensation Commission ("Commission"), Mundy attempted unsuccessfully to amend his claim to cover two other injuries that he alleged were related to his knee injury. Mundy sought judicial review of the Commission's decision in the Circuit Court for Prince George's County, which ruled in his favor. Appellant Prince George's County Board of Education ("County Board" or "Board") presents two questions for our review:

> 1. "Whether the Circuit Court erred in denying Appellant's motion *in limine* to exclude certain portions of the testimony of Dr. Kevin McGovern and/or hold a *Frye-Reed* hearing concerning the admissibility of testimony[?]"
>
> 2. "Whether the Circuit Court erred when it granted Appellee's motion *in limine* excluding certain portions of Appellant's cross-examination of Dr. McGovern[?]"

We affirm for the reasons that follow. We hold that Dr. McGovern's causation testimony was supported by a sufficient factual basis and, accordingly, the trial court properly admitted his testimony at trial. The circuit court properly excluded testimony regarding his history of treating patients—a backdoor means to present evidence that the expert witness was the subject of disciplinary action, otherwise prohibited by Maryland Code (1981, 2014 Repl. Vol., 2016 Supp.), Health Occupations Article ("HO"), § 14-410. *See Pepsi Bottling Group, et al. v. Plummer*, 226 Md. App. 460 (2016), *cert. denied*, 450 Md. 213 (2016).

BACKGROUND

On March 1, 2013, Mundy, a custodian at Eleanor Roosevelt High School, was

setting up the bleachers and railings to prepare for a basketball game. While carrying a railing, he slipped and fell injuring his right knee. His knee became and remained very swollen and painful. He developed an antalgic gait as a result of the injury.[1] Mundy continued to work for approximately two months before he sought medical treatment from Mark Cohen, M.D., an orthopedic surgeon, on April 29, 2013. At that point Dr. Cohen recommended Mundy rest his knee. Mundy filed a claim with the Commission on May 29, 2013, which the Commission accepted.

On May 30, 2013, Mundy returned to Dr. Cohen for additional treatment.[2] Dr. Cohen prescribed anti-inflammatory medication, gave Mundy a knee brace, and referred him for an MRI scan. The MRI scan revealed a large tear of Mundy's medial meniscus in his right knee. Dr. Cohen performed an arthroscopy of Mundy's right knee with a partial medial and lateral meniscectomy on August 14, 2013. During the surgical procedure, Dr. Cohen found a second smaller tear of the lateral meniscus. After surgery, Mundy attended physical therapy sessions to aid in his recovery.

Within a week of his surgery, Mundy developed pain in his hip in addition to his knee. Two weeks after his surgery, Mundy reported that he continued to walk with an

[1] An antalgic gait is defined as "a limp adopted so as to avoid pain on weight-bearing structures (as in hip injuries), characterized by a very short stance phase." Dorland's Illustrated Medical Dictionary 753 (Saunders, 32d ed. 2012).

[2] Dr. Cohen is deceased. Dr. Cohen was a former partner in Kevin McGovern, M.D.'s practice. Dr. McGovern testified in a deposition to the details of Mundy's pre- and post-operative condition, recovery, and progress from medical records and his first-hand knowledge of treating Mundy as a patient.

antalgic gait.[3] By his October 3, 2013 visit, approximately two months after his surgery, Mundy still walked with an antalgic gait, and reported that he had developed back pain and that his hip pain persisted. On November 18, 2013, Mundy filed a claim amendment to add his right hip to his workers' compensation claim. At Mundy's December 6, 2013 visit, approximately three and a half months after his surgery, he reported that he had severe back pain that at times felt like a "ten on a scale of ten" and that he still walked with an antalgic gait. Mundy had an electromyogram ("EMG") test that confirmed he had radiculopathy—irritated or compressed nerves in his lower back. Dr. Cohen prescribed periodic epidural steroid injections to reduce inflammation in his back.[4] On January 6, 2014, Mundy filed a second claim amendment to add his lower back to his workers' compensation claim.

The Commission held a hearing regarding Mundy's amended claims on February 19, 2015. On February 23, 2015, the Commission found no causal connection between Mundy's knee injury and his subsequent low back and right hip pain, and issued an order denying both claim amendments.

Mundy petitioned the circuit court for judicial review and a jury trial after the Commission denied his amended claims on March 17, 2015.[5]

[3] The medical record noted Mundy's limping had improved. Mundy, however, testified that his limp remained the same pre- and post-surgery. Around this time, Mundy switched from crutches to a cane.

[4] As of the date of trial, Mundy had four injections.

[5] Maryland Rule 7-202 permits a party to seek judicial review of an adverse decision

Deposition of Mundy's Expert Witness, Dr. McGovern

On March 2, 2016, in advance of the jury trial, the parties conducted a *de bene esse* deposition of Dr. McGovern, Mundy's expert witness.[6] His deposition is central in this appeal.

Dr. McGovern testified to the causal link between Mundy's knee injury and his hip and back pain—the issue upon which the Commission denied Mundy's two claim amendments.

Q. [Mundy's Counsel]	And, Doctor, whenever I ask you an [] opinion or conclusion, I only want you to give me that opinion if you have it to a reasonable degree of medical certainty. All right?
A. [Dr. McGovern]	Sure.
Q. [Mundy's Counsel]	And, Doctor, do you have an opinion as to the cause of the impairment of Mr. Mundy's back?
A. [Dr. McGovern]	Yes.
Q. [Mundy's Counsel]	And what is that opinion?
A. [Dr. McGovern]	He was injured March 1st, 2013 when he fell and

by the Commission. "Such party may choose to have the action judicially reviewed using the record made before the Commission or have an entirely new evidentiary hearing and decision before a jury." *S.B. Thomas, Inc. v. Thompson*, 114 Md. App. 357, 364 (1997). Maryland Code (1991, 2016 Repl. Vol.), Labor and Employment Article ("Lab. & Empl.") § 9-745 provides the framework for appeals from the Commission. Here, Mundy filed a petition for judicial review and, as permitted under Lab. & Empl. § 9-745(d), he filed a motion for a jury trial. The jury trial form of judicial review of a Commission's decision is distinct from a *de novo* jury trial because the circuit court presumes the Commission's decision is prima facie correct. Lab. & Empl. § 9-745(b)(1).

[6] A *de bene esse* deposition is a deposition taken for use at trial. The video of the deposition was played for the jury at trial.

injured his knee.

Q. [Mundy's Counsel] And, Doctor, after the surgery to Mr. Mundy's knee, he was experiencing pain in his right hip. Do you have an opinion as to what's the cause of that pain and impairment to his right hip?

A. [Dr. McGovern] Sure. The pain itself was the result of having surgery on his knee and not walking normally, being on crutches and using muscles to include his hip.

Q. [Mundy's Counsel] And, Doctor, what did you review before you came to this conclusion?

A. [Dr. McGovern] Well, I reviewed Mr. Mundy's medical records. I reviewed the reports of my own, as well as Dr. Cohen's. Um, I reviewed the operative note and I have also reviewed some literature that deals with limping and back pain and whether limping causes back pain and hip pain.

Q. [Mundy's Counsel] And did you also have the opportunity to perform a physical examination of Mr. Mundy?

A. [Dr. McGovern] Yes.

Dr. McGovern testified to how altered biomechanics can cause hip and back pain. He based the following testimony on his first-hand experience treating Mundy, his 30 years of experience in the field of orthopedic medicine and surgery, and on a 2004 (revised in 2013) paper written by a Canadian orthopedic surgeon, Ian J. Harrington M.D., titled "Limping and Back Pain" (the "Harrington Paper"):

Q. [Mundy's Counsel] And can you explain to us how limping could cause pain or impairment to a hip or back?

A. [Dr. McGovern] Sure. When you limp, you throw off the

mechanics of your body. When you limp . . . you try and get the center of gravity over your painful side which puts less stress and strain on the painful side. By balancing the weight over top of it rather than off to the side. . . . When you do that . . . the other side of your trunk goes to the other side as well. Normally when you walk your trunk doesn't shift back and forth.
So there's a paper in 2004 from Canada from a Dr. Harrington who discussed this whole process, and indicated, that most orthopaedic [sic] surgeons would agree, that by doing that you put additional stress on the muscles and ligaments of your back. And that will . . . cause pain in your back. Not everybody feels pain in their back, there's no doubt about that. I'm not trying to say that everybody gets pain in their back, but it is a fairly common cause of pain in the back and something we see on a regular basis.

Q. [Mundy's counsel] Doctor, you refer to a study by another doctor in Canada?

A. [Dr. McGovern] Yes.

Q. [Mundy's counsel] Have you also seen it in your experience in your practice that an individual a year after a knee injury or a knee surgery has problems of hip or back pain afterwards?

A. [Dr. McGovern] Yes. It's a fairly regular occurrence. Again, not everybody who hurts their knee will suffer pain in their hip or back, but it is not uncommon to see that.

The Harrington Paper explains, from a biomechanical perspective, that lower back pain may result from "exaggerated bending and rotation of the trunk" over a period of time "due to repetitive and exaggerated lateral bending of the spine as a result of a significant limp[.]" The paper's conclusion, however, qualifies its substance with the caveat that "clinical data

. . . directly related to the incidence of back pain . . . for individuals walking with a limp[] are limited and inconclusive."

On cross-examination, the County Board's counsel attempted to inquire about Dr. McGovern's history of treating patients.[7] Mundy's counsel made an immediate objection and continued to object as the Board's counsel attempted to rephrase the same question.

Q. [County Board's Counsel]	Okay, Doctor, have you ever over treated a patient?
A. [Mundy's Counsel]	Objection.
Q. Dr. McGovern:	Can we go off the record a second?
A. [County Board's Counsel]	Uh-huh.

[A brief off-the-record discussion occurred.]

[Mundy's Counsel]	I am going to object to any questions as to Dr. McGovern's background involving any sanctions or anything by the Medical Board. The Court of Special Appeals in the case of Pepsi Bottling Company versus Derrick Plumber has clearly said that this [sic] questions are inadmissible, as well as the material in addition to Health General Article and the Courts and Judicial Proceedings Article. And thank you.
[Dr. McGovern]	So, actually, before you go back on the record, I think that's exactly where you are headed. So I am not going to answer your question.

* * *

[County Board's Counsel]	So on the record, not on the video, would you also refuse to answer the question whether you

[7] This portion of the deposition was omitted from the video shown to the jury as a result of the circuit court's grant of Mundy's motion *in limine*. *See infra*.

ever failed to meet appropriate standards for delivering quality medical care?

[Mundy's Counsel] And I will object to the – same objection.

[Dr. McGovern] Of course. In fact, if you keep asking the questions, I am going to file a compliant [sic] with the Bar because you know you are not allowed to . . . ask these questions. The Court of Special Appeals has said it. And if you are going to persist on doing it, I will file a complaint that you are simply trying to harass me.

[County Board's Counsel] I would –

[Mundy's Counsel] Same – can you please note a continuing objection as to these questions?

[County Board's Counsel] Obviously, this will be a subject for pretrial discussion. So at this point I just ask that we hold the record open as a matter of record and I will make my objection or my response to [Mundy's counsel's] objection for the Judge as a matter of pretrial matters.

Jury Trial

This case was set for a one-day jury trial on March 14, 2016. Mundy testified and called Dr. McGovern as his expert witnesses. The County Board called Dr. Willie Thompson as its expert witness.[8]

[8] Dr. Thompson performed an independent medical examination of Mundy on February 10, 2014. He testified that:

> [T]here is absolutely no causation between the onset of back pain some 5-1/2 months after the injury.
>
> * * *
>
> And the statement that this is due to some type of gait abnormality simply is not consistent with the history that I reviewed. There's nothing in here that indicates that [Mundy] was limping or

At the beginning of trial, the court heard arguments on the parties' motions *in limine*, including the County Board's motion to exclude Dr. McGovern's testimony on causation, and Mundy's motion to exclude part of the Board's cross-examination questions of Dr. McGovern regarding over-treatment of patients.

The County Board argued that the court should strike Dr. McGovern's deposition testimony because his causation testimony was not supported by "sufficient factual basis" as required by Maryland Rule 5-702. The Board contended that it was unaware that Dr. McGovern would rely, in part, on a non-peer reviewed paper that did not support his conclusions. The Board claimed that it was unaware of the paper until the deposition.

Mundy countered, first, that the County Board failed to preserve its argument when it failed to state with specificity that it was objecting to Dr. McGovern's testimony on *Frye-Reed* grounds as required by *Mayor & City Council of Baltimore v. Theiss*, 355 Md. 234 (1999). Second, Mundy argued that the *Frye-Reed* analysis was inapplicable because the analysis applies to new scientific techniques; this case, however, pertained to the mechanism of injury.

> had an altered gait pattern prior to. When I saw him he had a normal gait pattern, a tandem gait, foot over foot, and walked just in what appeared to be a normal fashion.
>
> I am not aware of anything in orthopaedic [sic] text, the peer reviewed literature or anything that would support the allegation that is made regarding this individual's onset of back pain five and a half months after this injury and several weeks after orthoscopy surgery.

He also testified that, in his expert opinion, Mundy's back pain was not causally related to his March 1, 2013 knee injury.

The Board maintained that it was unaware Dr. McGovern's testimony was objectionable until he identified the study after the conclusion and realized the study did not support Dr. McGovern's testimony.

The circuit court denied the County Board's motion *in limine* to strike Dr. McGovern's testimony on causation for a number of reasons.[9] The court reasoned that the Board had notice that Dr. McGovern would rely on studies and the Board failed to request interrogatories or a discovery deposition in advance of the videotaped deposition to identify those studies. The court also determined that the Board's objection was not timely. The court was persuaded by Dr. McGovern's education and training, 30 years of experience, and first-hand knowledge of treating Mundy.

Mundy did not present any argument in support of his motion *in limine*. The County Board acknowledged that *Pepsi Bottling*, *supra*, was dispositive of the motion, but because a motion for certiorari was pending before the Court of Appeals in that case, it raised the issue in a motion to preserve the argument.[10] The court granted Mundy's motion *in limine* to exclude the Board's questions asking Dr. McGovern whether he had ever over-treated a patient and failed to meet the appropriate standards for delivering medical care, relying on *Pepsi Bottling*.

[9] After the jury watched Dr. McGovern's videotaped deposition, the County Board renewed its motion *in limine* on the same grounds. The trial court denied the motion again citing the same reasons.

[10] The Court of Appeals denied certiorari in that case after the parties' briefing deadline in this case.

The jury returned a verdict in favor of Mundy, finding that his injuries to his right hip and back resulted from his March 1, 2013 work accident. The court entered the order on March 25, 2016. The County Board timely filed a notice of appeal on April 22, 2016.

DISCUSSION

We review a trial court's decision to admit or exclude expert testimony under [Maryland] Rule 5-702 for abuse of discretion.[11] *Rochkind v. Stevenson*, 229 Md. App. 442, 452, *cert. granted*, 450 Md. 663 (2016) (citation omitted); *see also Reed v. State*, 283 Md. 374, 380 (1978) ("[T]his Court has held that the determination of [the admissibility of expert testimony] [is] generally [a] matter[] within the sound discretion of the trial court."). "A court's 'action in admitting or excluding such testimony will seldom constitute a ground for reversal.'" *Rochkind*, 229 Md. App. at 452 (quoting *Bryant v. State*, 393 Md. 196, 203 (2006)). Therefore, this Court must uphold the trial court's decision with respect to the motions *in limine* "'unless we conclude that [the court] acted arbitrarily or capriciously . . . or that 'no reasonable person would share the view taken by the [court].'" *Taylor v. Fishkind*, 207 Md. App. 121, 137 (2012) (quoting *Brown v. Daniel Realty Co.*, 409 Md. 565, 601 (2009) (alteration in *Taylor*))).

However, as the Court of Appeals stated in *Reed*,[12] whether *Frye-Reed* is applicable

[11] The parties dispute the proper standard of review. Mundy asserts that an abuse of discretion standard applies. The County Board asserts that a *de novo* standard applies.

[12] As we explain later in this opinion, in *Reed*, the Court of Appeals adopted the "general acceptance" rule for the admission of expert testimony that the D.C. Circuit set forth in *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923). 283 Md. at 389.

and whether a scientific opinion will be received into evidence based on a scientific process or technique is a matter of law, which we review *de novo* on appeal. 283 Md. at 381.

> The question of the reliability of a scientific technique or process is unlike the question, for example, of the helpfulness of particular expert testimony to the trier of facts in a specific case. **The answer to the question about the reliability of a scientific technique or process does not vary according to the circumstances of each case. It is therefore inappropriate to view this threshold question of reliability as a matter within each trial judge's individual discretion.** Instead, considerations of uniformity and consistency of decision-making require that a legal standard or test be articulated by which the reliability of a process may be established.

Id. (emphasis added). The Court of Appeals was careful to note that its "adoption of the *Frye* standard does not, of course, disturb the traditional discretion of the trial judge with respect to the admissibility of expert testimony. *Frye* sets forth only a legal standard which governs the trial judge's determination of a threshold issue." *Id.* at 389.

I.

Maryland Rule 5-703: The Admissibility of Expert Testimony

The County Board contends that Dr. McGovern's testimony on causation between a knee injury and hip and back pain lacked a sufficient factual basis as required by Maryland Rule 5-702(3), and is not generally accepted in the relevant scientific community as required by the *Frye-Reed* test. The Board points out that Dr. McGovern's testimony relied on one non-peer reviewed paper and his own observations. Excerpts from the paper indicate that clinical data regarding the causal relationship between limping and back pain is "limited and inconclusive." The Board maintains that the inference that the Harrington Paper supported Dr. McGovern's causation opinion was "misleading at best and

substantially shifted the balance of the evidence presented by the parties in [Mundy's] favor." The Board argues that the circuit court should have either excluded Dr. McGovern's testimony on causation or conducted a *Frye-Reed* hearing.[13]

Mundy responds that the County Board waived its objection to Dr. McGovern's testimony because it failed to make a timely objection and to specify the grounds—a *Frye-Reed* challenge—for its objection. Mundy also contends, without citation to the record, that the circuit court properly weighed Dr. McGovern's testimony under Maryland Rule 5-702 before admitting it. Lastly, Mundy argues that a Frye-Reed analysis is inapplicable because Dr. McGovern's testimony does not pertain to a novel scientific theory or methodology.

A. *De Bene Esse* Depositions: Waiver of Objections

First, we decide whether the County Board waived its objection. Mundy relies on *Mayor & City Council of Baltimore v. Theiss*, *supra*, 354 Md. 234, as the controlling authority on this point. In *Theiss*, the Court of Appeals held that the objecting party must object timely and state the ground for the objection during a deposition, or the objection is waived. *Id.* at 255, 257–58. Maryland Rule 2-415(h), however, which governs objections in depositions, was modified effective January 1, 2000 and in pertinent part, provides that

> All objections made during a deposition shall be recorded with the testimony. An objection to the manner of taking a deposition, to the form of questions

[13] Counsel for the Board appears to have argued the contrary in support of his motion *in limine* at the start of trial. He stated: "I don't believe we need a formal Frye-Reed hearing on this specifically because it's not a battle of the experts. I think it's Dr. McGovern's own testimony that he relies on this 2004 paper to support his opinion."

> or answers, to the oath or affirmation, to the conduct of the parties, or to any other kind of error or irregularity that might be obviated or removed if objected to at the time of its occurrence is waived unless a timely objection is made during the deposition. **An objection . . . to the competency, relevancy, or materiality of testimony is not waived by failure to make it before or during a deposition unless the ground of the objection is one that might have been obviated or removed if presented at that time. The grounds of an objection need not be stated unless requested by a party.** If the ground of an objection is stated, it shall be stated specifically, concisely, and in a non-argumentative and non-suggestive manner.

The rule distinguishes between objections related to "manner of taking a deposition, to the form of questions or answers, to the oath or affirmation, to the conduct of the parties, or to any other kind of error or irregularity" and objections related to the "competency of a witness or to the competency, relevancy, or materiality of testimony." For the first category, the Rule provides that an objection is waived unless it is timely made during the deposition if the ground for that objection may have been "obviated or removed if objected to at the time of its occurrence." *See, e.g.*, *Univ. of Maryland Med. Sys. Corp. v. Malory*, 143 Md. App. 327, 343 (2001) (holding that failure to object to the videotaping of a deposition—an issue that could have been cured at the time of deposition—was waived for appeal). The rule, however, does not impose a strict timely requirement for the second category of objections. Instead, for that category, the rule provides that an objection is not waived "unless the ground of the objection is one that might have been obviated or removed if presented at that time." *See, e.g.*, *Imbraguglio v. Great Atl. & Pac. Tea Co.*, 358 Md. 194, 205 (2000) (holding that petitioner did not waive his objection for failing to object during the deposition because "[r]espondents could not cure the hearsay character of the factual material . . . by examining the deponents who had no personal knowledge of that

factual matter").

At oral argument counsel for the County Board conceded that it did not raise an objection to the testimony regarding the 2004 paper at the deposition. Clearly, however, the missing objection to the admissibility to the paper falls under the second category of objections—"competence, relevancy, or materiality of testimony." *See* Md. Rule 2-415(h). In this case, a failure to make an objection "before or during a deposition" does not result in waiver "unless the ground of the objection is one that might have been obviated or removed if presented at that time." Whether a *Frye-Reed* analysis is required before the admission of expert testimony is a legal determination and may require a hearing conducted by the trial court. As such, we hold that the County Board's objection was not waived.

B. Motion *in Limine*

Next, we decide whether the trial court properly denied the County Board's motion *in limine*. Rule 5-702, governing testimony by experts, provides that:

> Expert testimony may be admitted, in the form of an opinion or otherwise, if the court determines that the testimony will assist the trier of fact to understand the evidence or to determine a fact at issue. In making that determination, the court shall determine (1) whether the witness is qualified as an expert by knowledge, skill, experience, training, or education, (2) the appropriateness of the expert testimony on the particular subject, and (3) whether a sufficient factual basis exists to support the expert testimony.

The Board does not contest that Dr. McGovern met the first two requirements of Rule 5-702. Instead, the Board contends that Dr. McGovern's testimony was not supported by a sufficient factual basis, and maintains that Dr. McGovern's testimony was subject to the *Frye-Reed* general acceptance test.

As we stated in *Samsun Corporation v. Bennett*, "'[t]he facts upon which an expert bases his opinion must permit reasonably accurate conclusions as distinguished from mere conjecture or guess.'" 154 Md. App. 59, 75 (2003) (quoting *Sippio v. State*, 350 Md. 633, 653 (1998)). "A factual basis for expert testimony may arise from a number of sources, such as facts obtained from the expert's first-hand knowledge, facts obtained from the testimony of others, and facts related to an expert through the use of hypothetical questions." *Id.* (quoting *Sippio*, 350 Md. at 653).

In the context of testimony based on novel scientific techniques and methodologies, Maryland has interpreted the third requirement of Rule 5-702—a sufficient factual basis—to mean such testimony must meet the *Frye-Reed* test. *Reed*, *supra*, 283 Md. at 389. In *Frye*, the United States Court of Appeals for the District of Columbia Circuit was presented with the issue of whether the systolic blood pressure deception test was admissible. *Frye v. United States*, 293 F. 1013, 1014 (D.C. 1923). The court enunciated the general acceptance test, which is used to determine when "scientific principle or discovery crosses the line between the experimental and demonstrable stages" and, therefore, whether testimony based on that scientific principle or discovery is admissible. *Id.* The court described this test as:

> Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made **must be sufficiently established to have gained general acceptance in the particular field in which it belongs.**

Id.

In *Reed*, the Court of Appeals was presented with the issue of the admissibility of testimony based on "voiceprints" or spectrograph. 283 Md. at 375. In holding that this testimony based on the novel scientific techniques of "voiceprints" or spectrograph was inadmissible in Maryland courts, the Court adopted the *Frye* general acceptance test. *Id.* at 380–81, 399.

Returning to the case at bar, the parties disagree about whether *Frye-Reed* applies to Dr. McGovern's causation testimony. Both parties cite to *Chesson*, *supra*, 434 Md. 346. In *Chesson*, six employees brought workers' compensation claims for neurocognitive and musculoskeletal symptoms allegedly resulting from exposure to mold at their workplace. *Id.* at 361. The employees proffered a physician expert witness to establish causation between their symptoms and exposure to mold. *Id.* The physician's testimony relied on a method for determining causation referred to as a "differential diagnosis."[14] *Id.* The physician testified to his method of diagnosis, which was based on "'Repetitive Exposure Protocol,' a technique that he developed to study 101 individuals who worked or reside in forty buildings and complained of neurocognitive and musculoskeletal symptoms[.]" *Id.* at 364. After identifying the presence of mold in the buildings, the physician reviewed each individual's medical history to eliminate other possible causes of the symptoms. *Id.* The physician then observed the change in symptoms when the individuals were removed

[14] Differential diagnosis has been characterized "as 'a process of elimination' [and] defined as, '[t]he process of weighing the probability of one disease versus that of other diseases possibly accounting for a patient's illness.'" *Chesson*, 434 Md. at 350 n.2 (quoting *Blackwell v. Wyeth*, 408 Md. 575, 613-18 (2009)) (alteration in *Chesson*).

from the buildings for a period of time and given a dose of Cholestyramine, and then re-exposed to the buildings. *Id.* at 364–65. His study found that the symptoms these individuals were experiencing were alleviated when they were removed from exposure, and then returned when they were re-introduced to the buildings with mold. *Id.* at 365. The physician later added a blood test and a visual contrast sensitivity test to his protocol to "test for six biological markers [that], he opined, the presence of at least three indicated that mold exposure was the cause of the neurocognitive and musculoskeletal symptoms." *Id.* at 365.

The Court of Appeals, in *Chesson*, held that the physician expert's differential diagnosis method was inadmissible because it was not generally accepted in the scientific community. *Id.* at 380. The Court was persuaded by the ample scientific literature that indicated that the link between mold exposure and neurocognitive and musculoskeletal symptoms was unverified and controversial, and that other jurisdictions had determined that the "Repetitive Exposure Protocol" was neither generally accepted nor reliable. *Id.* at 374, 379–80.

As *Chesson* demonstrates, *Frye-Reed* applies in circumstances that concern the general reliability of scientific techniques and methods. *See, e.g.*, *Blackwell v. Wyeth*, 408 Md. 575, 608 (2009) (holding that an expert's causation testimony between autism and thimerosal in vaccines contained an "analytical gap" and was not generally accepted as required by *Frye-Reed*); *Keene Corp., Inc. v. Hall*, 96 Md. App. 644, 680 (1993) (holding use of polarized light microscopy to identify asbestos fibers was not generally accepted in

the relevant scientific community as required by *Frye-Reed* and, therefore, was inadmissible); *cf. Rochkind*, 229 Md. App. at 463 (holding that a pediatrician's expert testimony that exposure to lead-based paint caused attention deficit hyperactivity disorder symptoms in residence's former occupant was admissible and the trial court did not abuse discretion in denying a *Frye-Reed* hearing because "it has been widely accepted that lead exposure at levels insufficient to produce acute illness nevertheless causes deleterious health effects, especially cognitive deficits in children"); *see also Stevenson v. State*, 222 Md. App. 118, 130–34 (2015) (holding that the circuit court did not abuse its discretion by admitting cellular tower "ping" evidence without a *Frye-Reed* hearing because it is not a novel technique and it is widely accepted). These scientific techniques and methods are used at trial to demonstrate to the fact finder the logical and medical connection between the two otherwise unrelated occurrences. In this case, despite the County Board's insistence, we are not presented with a scientific method, but, instead, an expert witness's testimony regarding the causation between a knee injury and hip and back pain.

We do not read Rule 5-703(3) as narrowly as the County Board urges. Factual support for expert testimony arises from numerous sources including first-hand experience treating a patient and observations in one's medical practice. Experts' opinions are not limited to those which are supported by scientific studies and literature. *See Rite Aid Corp. v. Levy–Gray*, 162 Md. App. 673, 707, 709 (2005) (holding experts met the sufficient factual basis requirement of Rule 5-702(3) with their experience treating patients diagnosed with Lyme disease with doxycycline); *see also Stevenson*, 222 Md. App. at 135–36

(holding that an expert was qualified to testify in "the area of 'call detail record analysis, call detail interpretation and cell site mapping'" based on his experience, training, and education).

In *Rite Aid*, appellee sued Rite Aid for an adverse health reaction, alleging that the prescription information sheet contained incorrect prescription administration information. 162 Md. App. at 679–80. On appeal, Rite Aid contended that appellee's experts' testimony lacked a sufficient factual support and specifically "fault[ed] those experts for not providing 'a single study or textbook to support [their causation theory].'" *Id.* at 707. This Court rejected Rite Aid's argument, holding that the experts' causation testimony was supported by sufficient factual basis—their experience treating patients with the same disease and with the same prescription. *Id.* at 709.

We maintain the position that "[i]t is unreasonable to require appellants or their expert to produce a study whose conditions match all predicate facts of the case and whose conclusions fit the expert's theory." *Muti v. Univ. Maryland Med. Sys. Corp.*, 197 Md. App. 561, 584 (2011), *vacated on other grounds*, 426 Md. 358 (2012); *see also Rite Aid*, 162 Md. App. at 707, 709. Dr. McGovern's testimony was not based on a technique or methodology; instead, he described how the biomechanics of the human body are affected when an individual walks with an antalgic gait. Dr. McGovern based his testimony on four factual bases: 1) his personal knowledge of Mundy's case as one of his treating orthopedic surgeons, 2) his 30 years of experience in the orthopedic surgery field, 3) other orthopedic surgeons' experience in the field, and 4) the Harrington Paper. Dr. McGovern testified that

> When you limp, you throw off the mechanics of your body. When you limp . . . you try and get the center of gravity over your painful side, which puts less stress and strain on the painful side by balancing the weight over top of it rather than off to the side. . . . When you do that, then you step on the other side. Your trunk goes to the other side as well. Normally when you walk your trunk doesn't shift back and forth.

He then cited to the Harrington Paper. The Harrington paper is not a study; instead, it is akin to an expository essay written for The Workplace Safety and Insurance Appeals Tribunal to provide general information about the interrelation between leg, knee, and back injuries. The Harrington Paper does not purport to be a definitive authority on the causation between knee injuries and secondary back pain, and Dr. McGovern also did not hold it out to be such.

Dr. McGovern referenced the paper for the benefit of its intended purpose—to explain the biomechanics of the human body and how they are altered when an individual walks with various types of gaits or has an injury. When Dr. McGovern referred to the Harrington Paper, he testified:

> So there's a paper in 2004 from Canada from a Dr. Harrington **who discussed this whole process** and indicated, as most orthopedic surgeons would agree, that when you limp you put additional stress on the muscles and ligaments of your back and that . . . can cause pain in your back.

In fact, after mentioning the paper, Dr. McGovern qualified his testimony by stating that "[n]ot everybody who limps develops pain in their back. There is no doubt about that. I am not trying to say everybody who limps gets pain in the back, but it is a fairly common cause of pain in the back and something we see on a regular basis." Although the Harrington Paper states that limping may cause back symptoms, the author qualified his

conclusion by stating that clinical data "related to the incidence of back pain in the general population for individuals walking with a limp[] are limited and inconclusive."

Dr. McGovern's testimony—based on facts obtained from his first-hand knowledge of Mundy's injury and subsequent treatment and facts obtained through his 30 years of experience—met the requirement of Rule 5-702(3). The fact that there are no peer-reviewed studies on the causation between an antalgic gait and secondary injuries to the back and hip goes to the weight of Dr. McGovern's testimony, not admissibility. *See Muti*, 197 Md. App. at 584; *cf. Roy v. Dackman*, 445 Md. 23, 43 (2015) (noting that weight of an expert's testimony is determined by the jury and is not a threshold matter resolved by the judge). Further, "'even if [a particular scientific] study is contrary to the results of other studies,' the fact that an expert witness relies upon that study 'does not invalidate the entire basis of his [or her] opinion.'" *Rochkind*, 229 Md. App. at 464–65 (quoting *Dackman*, 445 Md. at 51–52 n.16) (alteration in *Rochkind*). "Rather, '[s]uch is the grist for cross-examination and dueling experts and for resolution by the relative weight assigned by the fact-finder.'" *Id.* (quoting *Dackman*, 445 Md. at 52 n.16). As the trial court pointed out, the County Board had ample time between learning of the Harrington Paper at the *de bene esse* deposition and trial to construct its defense. For example, the Board could have called its expert witness and/or Dr. McGovern at trial to question them regarding the reliability of Dr. McGovern's causation testimony and the conclusions of the Harrington Paper. But the Board failed to take such measures. Accordingly, we hold the trial court did not err in denying the County Board's motion *in limine*.

II.

Cross-Examination of Dr. McGovern

At Dr. McGovern's deposition, the County Board posed two questions—whether Dr. McGovern had ever over-treated a patient, and whether he had ever failed to meet the appropriate standards for delivering medical care—to which Mundy's trial counsel objected promptly and stated the grounds clearly.

The County Board, in its brief, contends that Dr. McGovern's testimony should be excluded for failing to submit to cross-examination on his motive and potential bias or, alternatively, the circuit court should have ordered Dr. McGovern to submit to cross-examination pursuant to Maryland Rule 2-415(i).[15] The Board maintains that this cross-examination testimony is relevant because Dr. McGovern is Mundy's treating physician and has an ongoing financial interest in the case. At oral argument, however, the Board's counsel declined to make an argument after conceding that *Pepsi Bottling* is controlling authority and that the Court of Appeals denied the previously pending petition for certiorari. Nevertheless, the Board's counsel still asked that this Court rule on this issue.

Maryland Code Health Occupations Article § 14-410(a) provides, in part, that "proceedings, records, or files of the [State Board of Physicians], a disciplinary panel, or any of its other investigatory bodies are not discoverable and are not admissible in evidence[.]" This Court recently held that "there is no exception to the privilege that

[15] Rule 2-415(i) provides that "[w]hen a deponent refuses to answer a question, the proponent of the question shall complete the examination to the extent practicable before filing a motion for an order compelling discovery."

permits evidence of an adverse ruling of the Board to be used for cross-examination or impeachment of a physician who is testifying as an expert witness." *Pepsi Bottling*, 226 Md. App. at 480. We recognized that

> [t]here may be some appeal to the suggestion that, when a physician is voluntarily testifying about a healthcare issue as a paid expert witness, adverse rulings of the Board should, at a minimum, be a permissible topic of cross-examination if pertinent to the witness's expertise. But the statutory language of HO § 14–410 does not permit us to conclude that the legislature provided for different levels of privilege dependent upon the physician's role in the civil or criminal litigation. Consequently, we conclude that the General Assembly did not intend that doctors who have been the target of Board proceedings could be compelled to provide testimonial evidence about the disciplinary proceedings even though all documentary evidence regarding the action of the Board is protected by the privilege in HO § 14–410(a).

Id. at 478. Therefore, as we previously concluded, the circuit court properly excluded the portion of the cross-examination of Dr. McGovern that was inadmissible under HO § 14-410.

JUDGMENT AFFIRMED. COSTS TO BE PAID BY APPELLANT.