

**IN THE FIFTH DISTRICT COURT OF APPEAL  
STATE OF FLORIDA**

PRISCILLA LEWIS, Personal  
Representative of the Estate of  
CLARENCE LEWIS,  
*Plaintiff-Appellant,*

Case No. 5D2024-1567

v.

NORFOLK SOUTHERN  
RAILWAY COMPANY,  
*Defendant-Respondent.*

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Appeal from the Circuit Court of the Fourth Judicial Circuit  
in and for Duval County, Florida  
Case No. 16-2017-CA-005800

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**INITIAL BRIEF OF APPELLANT**

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## **STATEMENT OF THE CASE AND FACTS**

### **A. Nature of the Case**

Clarence Lewis worked for the Norfolk Southern Railway Company, a common carrier by rail, for nearly 40 years (ROA.2-3, 40). He then was diagnosed with chronic lymphocytic leukemia (“CLL”), from which he died (ROA.3, 40). His widow and personal representative, Priscilla Lewis, brought a wrongful death negligence action for damages against Norfolk Southern under the FELA, 45 U.S.C. §§ 51 *et seq.*, alleging his exposure to known carcinogens diesel exhaust and benzene during his work for Norfolk Southern caused or contributed to his CLL (ROA.1-7).

Mrs. Lewis identified Dr. Paul Rosenfeld, Ph.D., as her liability expert (ROA.16-17). Norfolk Southern moved to exclude Dr. Rosenfeld, arguing his opinion was not sufficiently reliable to be admissible (ROA.19, 21). The trial court granted Norfolk Southern’s motion to exclude Dr. Rosenfeld (ROA.754).

Norfolk Southern then moved for summary judgment, arguing Mrs. Lewis could not prove her claims without Dr. Rosenfeld’s testimony, because her medical causation expert had relied on Dr. Rosenfeld for the facts underlying his opinion (ROA.1291). The trial court granted Norfolk Southern summary judgment (ROA.2185).

Mrs. Lewis now appeals (ROA.2189).

**B. Mrs. Lewis's claims**

Clarence Lewis worked for Norfolk Southern from May 1975 through June 2014 as a switchman, brakeman, conductor, and engineer (ROA.2). In 2011, when he was 57 years old, he was diagnosed with chronic lymphocytic leukemia ("CLL"), a type of cancer (ROA.3, 40, 1316). He retired from Norfolk Southern in summer 2014 while undergoing treatment but died from the CLL in September 2014 (ROA.3, 40, 1316-17).

In 2017, Mr. Lewis's widow, Priscilla Lewis, as personal representative of his estate, filed a wrongful death negligence action for damages against Norfolk Southern under the FELA in the Circuit Court of Duval County, alleging his exposure to the known carcinogens diesel exhaust and benzene during his employment caused his CLL (ROA.1-7). She alleged this was negligence in a number of ways (ROA.3-5).

Mrs. Lewis's liability expert, Dr. Paul Rosenfeld, Ph.D. (ROA.16-17), interviewed Mrs. Lewis, read her and several of Mr. Lewis's coworkers' depositions, and provided a summary of Mr. Lewis's work and exposures (ROA.40-44).

Mr. Lewis primarily worked out of the Simpson Yard in Jacksonville, Florida, initially as a coal laborer but then as a switchman, conductor, and engineer (ROA.40). He traveled routes between Jacksonville and Macon, Georgia (ROA.40).

Mrs. Lewis said Mr. Lewis mainly worked as an engineer, operating trains and communicating with conductors, operating out of Jacksonville and conducting runs to Macon (ROA.41). He was exposed to diesel exhaust every day and would get diesel fuel and diesel exhaust on his clothes and hair (ROA.41).

Barbara Lott was one of Mr. Lewis's coworkers at the Simpson Yard from 1984 to 2016, working as a clerk in both the office and yard checking in trains and making sure cars were lined up correctly (ROA.41).

Ms. Lott said Mr. Lewis worked as a switchman before becoming an engineer, during which his job duties involved being "on the ground putting cars into different tracks, building trains, building outbound trains" (ROA.41). Ms. Lott could see and smell diesel exhaust while working on the ground in railyards (ROA.41-42). She said switchmen like Mr. Lewis were regularly exposed to diesel exhaust while working near engines in Norfolk Southern's yards (ROA.41-42).

Ms. Lott said that as an engineer, Mr. Lewis would take trains back and forth on routes primarily in the local area (ROA.42). She saw him daily taking trains up and down the yard or switch them out, during which he would work around diesel exhaust from the engine smokestacks or other diesel-powered machinery in the yard (ROA.42).

Ms. Lott said that during her more than 30 years with Norfolk Southern, the railroad never provided her with any information on any type of exposure she may have had while working in the railyard, nor was she warned any substances to which she was exposed could cause cancer (ROA.42). She also did not recall any employees using respirators in the yard or wearing respirators during her career, nor was she ever trained or advised to wear a respirator (ROA.42).

Bobby Jamison was also one of Mr. Lewis's coworkers as a switchman and engineer at the Simpson Yard from 1974 to 1998 (ROA.43). He recalled significant exposure to diesel exhaust and diesel fumes in his work environment from engines in the yard, which would run all day, as well as from engines in the shop (ROA.43). He recalled a high frequency of diesel fuel spills in the yard that also resulted in additional exposure to diesel fumes leaching up from the ground in the railyard (ROA.43).

Mr. Jamison said he was exposed to diesel exhaust on a daily basis from engines constantly idling in the yard and when he picked up engines left running inside the shop (ROA.43). He also recalled bringing engines into the Simpson Yard shop because they were emitting excessive amounts of exhaust

and fumes (ROA.43). He stated he could smell diesel exhaust and fumes inside running engines even when the windows were closed, and was further exposed to diesel exhaust and diesel fumes when cab windows were left open (ROA.43-44).

Mr. Jamison said he wore a dust mask at times but did not recall any formal training for respiratory protection, nor did he ask for additional respiratory protection because he was unaware it was available (ROA.44). He was never warned about the hazards the substances to which he was exposed during his employment posed (ROA.44).

### **C. Dr. Rosenfeld's evaluation and report**

Dr. Rosenfeld prepared a report (ROA.35-170) "describing the negligence of [Norfolk Southern] regarding [Mr. Lewis]'s occupational exposure to diesel exhaust and benzene during his employment" (ROA.38).

#### **1. Qualifications**

Dr. Rosenfeld has a Ph.D. in soil chemistry and an M.S. in environmental science and has been a professor of public health and taught courses on environmental health (ROA.38-39, 171-72, 177). For more than 25 years, various governmental entities, municipalities, and industries have hired him to collect air samples, evaluate and model pollution sources, design remediation programs, evaluate exposures, and perform risk assessments,

including managing contaminated sites for the United States Navy in which he engaged in investigations, air monitoring, and remedial actions (ROA.38-39, 171-87). He interviewed Mrs. Lewis and reviewed depositions of Mrs. Lewis and Mr. Lewis's coworkers, discovery, federal and state agency and industry group documents, and technical and scientific literature (ROA.39-40).

## **2. General conclusions about diesel exhaust, benzene, and Norfolk Southern**

Dr. Rosenfeld explained diesel exhaust is a carcinogen, with considerable evidence that exposure to it increases cancer risk (ROA.67-113). He detailed the history of scientific and railroad-industry knowledge of this from 1955-present, showing it increased cancer incidence in railroad workers (ROA. 72-113), especially "locomotive crews operating behind a preceding exhaust stack" (ROA.89).

Dr. Rosenfeld explained the railroad industry knew by the 1950s that diesel exhaust was carcinogenic and detailed findings and directives from the Federal Railroad Administration, Congress, NIOSH, and the EPA from 1965 to 2016 recognizing it as a carcinogen by inhalation with no safe levels and mandating mitigation including reducing locomotive idling and prohibiting exhaust from entering cabs (ROA.72-100). He also detailed similar findings and recommendations by state agencies, the International

Agency for Research on Cancer (“IARC”), and industry groups, including mitigating exhaust exposure by railroad workers by various methods including respiratory protection and air conditioning (ROA.107-32).

Dr. Rosenfeld explained that benzene is a component of diesel exhaust and is also a known carcinogen (ROA.132-36, 138-57). He reviewed scientific, governmental, and railroad-industry knowledge of its toxicity from 1948-present, detailing OSHA and other guidelines mandating zero exposure (ROA.132-36, 138-57).

Dr. Rosenfeld described Norfolk Southern’s history of and responses to exposures to diesel exhaust and benzene among its workers (ROA.65-72). Despite knowing diesel exhaust exposure’s carcinogenicity since 1955 and industry and government findings, Norfolk Southern did not adopt any internal policy about it until 2006, in which it claimed to its employees in a “Diesel Information Sheet” that there is a “lack of evidence of chronic, non-cancer health effects at occupational exposure levels” and “[t]here also remains a question in the scientific community as to whether diesel exhaust causes lung cancer” (ROA.65-69). Dr. Rosenfeld explained that these statements were not true, as by 1988, the National Institute of Occupational Safety and Health (“NIOSH”) recommended warning workers using diesel-powered equipment that diesel exhaust was a carcinogen, and in 2017 found there was



no safe level of diesel exhaust exposure when it came to cancer risk (ROA.67-69).

Dr. Rosenfeld noted that none of Norfolk Southern's safety rules from 1993 to 2015 recommended a respirator or mask be worn in the railyards or near locomotives to limit exposures to diesel exhaust (ROA.65). Norfolk Southern recommended hearing protection while on or near locomotives during the same period, but it made no mention of any respiratory protective measures, nor did any of Norfolk Southern's "Safety Rules contain recommendations or safety rules in order to reduce exposure to diesel exhaust ... or other carcinogenic substances" (ROA.65-66). At one point, Norfolk Southern required that "respirators prescribed by instructions from employing departments must be worn in specified areas, jobs, or conditions," but "job duties that require employees to be near idling or operating locomotives are not mentioned ... as a specified area, job, or condition that would require an employee to wear respirator," nor did any safety guidelines "have specific references to a respirator that protects against 'diesel air emissions'" (ROA.66).

### **3. Conclusions about Mr. Lewis's exposures**

Dr. Rosenfeld then estimated the level of Mr. Lewis's exposure to diesel exhaust and benzene in a demonstrative health risk assessment (ROA.48-64).

Dr. Rosenfeld used methodology from the Environmental Protection Agency (“EPA”) Integrated Risk Information System (“IRIS”), which resulted in a demonstrative health risk assessment that articulates prior work exposures (ROA.48). This method also is used by state and federal agencies including the U.S. Army, Navy, Air Force, Marine Corps, and EPA (ROA.48-49). NIOSH also recommends evaluation of guidance from IRIS to quantify risk assessment of human exposure to chemical carcinogens (ROA.49; Depo at 61).

First, Dr. Rosenfeld quantified the chronic daily intake for exposed workers, using an equation per the EPA’s guidelines to do this (ROA.50-51). This included using the EPA’s recommended default values for days worked, hours worked, and the standard 70-year value for lifetime carcinogenic risk (ROA.50-51). This equation provided Dr. Rosenfeld with a chronic daily intake for various levels of diesel particulate matter over various durations of time (ROA.50-51).

Next, Dr. Rosenfeld calculated a range of worker inhalation cancer risk values (ROA.53). To do so, he took the various chronic daily intake levels calculated in the previous step and multiplied it by the EPA-recommended diesel exhaust inhalation unit risk (ROA.52-53). He explained that the inhalation unit risk factor for diesel exhaust is determined by the ambient diesel particulate

matter concentration in each worker's occupational environment (ROA.54).

Dr. Rosenfeld stated, "DPM, or diesel particulate matter, is the particulate fraction of diesel exhaust and has historically been used as a surrogate measure of exposure to whole diesel exhaust" (ROA.51). He acknowledged that the most widely used method to measure diesel particulate matter is to measure airborne elemental carbon (ROA.51-52). But the EPA equations require diesel particulate matter values and not elemental carbon values (ROA.54). So, using the empirical data in peer-reviewed literature, Dr. Rosenfeld compared elemental carbon levels from similar workers employed in similar work environments and calculate diesel particulate matter levels for his risk assessment (ROA.54-56).

Applying the EPA risk assessment guidelines, Dr. Rosenfeld produced a table and graph of the worker inhalation cancer risk of diesel exhaust at varying levels and at varying exposure durations (ROA.60-61). Specifically, Dr. Rosenfeld determined Mr. Lewis's exposure to elemental carbon during his career as a conductor and engineer for his 39-year career was most comparable to the analysis of "Engineer/driver/conductor/trainmen" in *Occupational Exposure to Diesel Engine Exhaust: A Literature Review* by Anjoeka Pronk, et al (ROA.62-63, 91). In that study, the arithmetic mean of those

workers' elemental carbon exposure was five micrograms per cubic meter (ROA.91).

Using the peer-reviewed data to convert elemental carbon levels to diesel particulate matter levels, Dr. Rosenfeld was able to estimate an employee's diesel exhaust exposures (ROA.57-58, 60-61). For example, he stated that exposure to one microgram per cubic meter of diesel particulate matter for one working years for eight hours per day resulted in an increased cancer risk of one in one million (ROA.61). In Mr. Lewis's case, Dr. Rosenfeld prepared a table demonstrating the increased risk of cancer Mr. Lewis would have had (ROA.64). Therefore, he concluded, per this demonstrative health risk assessment, at 39 years on the railroad, Mr. Lewis had a substantially increased risk of developing cancer (ROA.63-64).

Dr. Rosenfeld testified that this methodology is standard and well-established (ROA.244). Not only was it used by the federal and state agencies mentioned above, but the California Air Resources Board had published 18 risk assessments for railyards using similar methods (ROA.244-45).

In his discovery deposition, Dr. Rosenfeld stated that this assessment was for cancer risk generally and not just lung cancer (ROA.297-98). To the contrary, he testified this same assessment method was used to calculate excess cancer risk for types of cancer

other than lung cancer (ROA.303-04). Some of the studies on which he relied concerned cancer besides lung cancer (ROA.88, 90).

#### **4. Ultimate conclusions**

Based on his discussion and evaluation, Dr. Rosenfeld concluded Mr. Lewis “was exposed to significant and above background levels of locomotive diesel exhaust while working in [Norfolk Southern]’s yards and diesel locomotives” (ROA.100).

Dr. Rosenfeld then concluded to a reasonable degree of scientific certainty that Mr. Lewis was exposed to above background amounts of diesel exhaust and benzene throughout his employment with Norfolk Southern, the railroad failed to monitor, mitigate, or eliminate this when it should have, and this failed to comply with government and industry mandates (ROA.134-35). He concluded, “throughout Mr. Lewis’ career the actions of [Norfolk Southern] did not meet a reasonable standard of care” (ROA.135).

In his deposition, Dr. Rosenfeld stated he was not assessing Mr. Lewis’s risk of CLL due to exposure to diesel exhaust and benzene but rather, he conducted health risk assessments to determine potential liability for exposures (ROA.305).

#### **D. Dr. Levin’s evaluation and report**

Mrs. Lewis listed Dr. Mark Levin, M.D., as her medical expert on causation of Mr. Levin’s injury and death (ROA.17).

Dr. Levin is a licensed, board-certified physician specializing in internal medicine and oncology (ROA.1314). He has been a professor of medicine and a director of hematology and oncology in institutions, and has treated, advised, and provided opinions on cancer causation and carcinogenesis (ROA.1314-15).

Dr. Levin produced a report (ROA.1314-34) concluding with a reasonable degree of medical certainty that exposure to benzene and diesel exhaust containing benzene caused or contributed to Mr. Lewis's development of CLL.

(ROA.1334). Norfolk Southern never sought to exclude Dr. Levin as a witness.

While Dr. Levin also reviewed deposition transcripts of Ms. Lott, Mr. Gibbs, and Mrs. Lewis, he also obtained the details of Mr. Lewis's exposures from Dr. Rosenfeld's report (ROA.1315-16). In his discovery deposition, Dr. Levin testified he obtained Mr. Lewis's exposure information from Dr. Rosenfeld's report and "relied on him to process and explain and reach a conclusion" (ROA.1676). He said he obtained the information that "[d]uring his employment Mr. Lewis was exposed to excessive amounts of diesel exhaust, which contains benzene," from Dr. Rosenfeld" (ROA.1680-82).

#### **E. Proceedings below**

Norfolk Southern moved to exclude Dr. Levin, arguing his opinion failed to meet the admissibility requirements of Fla. Stat. §

90.702 (ROA.19-34). It argued his methodology for was unreliable and untested because it was never subject to peer review or publication and was never validated (ROA.26-29). It argued this was because his conversion of EC levels to DPM was not part of the generally accepted method and instead was personal to him (ROA.27). It argued he only considered EC levels for non-railyard environments and did not do so for railyards (ROA.27). It argued all his metrics pertained to lung cancer and not CLL (ROA.28). It argued the demonstrative risk assessment tool was for Superfund sites that had nothing to do with diesel exhaust and had not been published as a useful tool for this kind of assessment (ROA.28-29). Finally, it argued the methodology, even if itself reliable, was not reliably applied to the facts here, because the assessment tool was only for lung cancer and not CLL (ROA.29). It took issue with some articles he cited, as well as his citation to NIOSH, IARC, and other materials (ROA.29-32).

Mrs. Lewis opposed Norfolk Southern's motion to exclude Dr. Rosenfeld (ROA.353-87). She argued that under the FELA's standard of causation, Dr. Rosenfeld's testimony was admissible so long as he could help show the railroad exposures were likely contributing factors to Mr. Lewis's CLL (ROA.365-66). She argued Dr. Rosenfeld's methodology was reliable because it was generally specific and explicitly developed by the EPA for conducting risk

assessments that were not actually limited to lung cancer (ROA.368-73). She argued that the application was reliable, too, because Dr. Rosenfeld reviewed case-specific information and general research and made applications specific to Mr. Lewis's case (ROA.373-74). She argued Dr. Rosenfeld explained that the studies and the risk assessment tool were not limited to lung cancer, as Norfolk Southern argued, but were applicable to any cancer risk in general (ROA. 374-77). She argued Dr. Rosenfeld properly relied on accounts of witnesses Ms. Lott and Mr. Jamison, as well as numerous peer-reviewed studies that were not limited to lung cancer (ROA. 375-78). She argued that given the FELA standard of causation, these opinions would assist the trier of fact in determining whether Norfolk Southern breached its duty of care (ROA.381-83).

After a hearing (ROA.1176-1244), the trial court entered an order granting Norfolk Southern's motion to exclude Dr. Rosenfeld (ROA.754). It held Mrs. Lewis failed to show his opinions met the threshold test of reliability because his methods were not subject to peer review or publication, nor was his methodology validated for assessing risks associated with developing CLL due to diesel exhaust exposure (ROA.755-56). It held this was because, "In testimony, Dr. Rosenfeld concedes the generally accepted method for calculating diesel exhaust/diesel particulate matter ('DPM')



through rough measurement of elemental carbon (‘EC’) and comparing those results to exposure guidelines,” but “Dr. Rosenfeld instead converted EC levels to DPM, which is apparently unique to his personal methodology” (ROA.756). It held the literature did not support this, and “[f]urther, Dr. Rosenfeld appears to have relied on EC level data not correlated to” Mr. Lewis,” which “renders Dr. Rosenfeld’s most foundational opinion, Decedent’s exposure level, unreliable under the *Daubert* inquiry” (ROA.756).

The court also held that Dr. Rosenfeld’s use of the EPA risk assessment was not reliably applied to the facts of this case, because “specifically, Dr. Rosenfeld concedes that the risk assessment tool itself is supported by data based only upon *lung cancer*,” and could not say whether that tool could reliably be used to calculate excess cancer risk for things other than lung cancer” (ROA.756). It held that “Absent some evidentiary correlation to CLL, Plaintiff’s disease, the Court is concerned Dr. Rosenfeld’s opinions on this matter would require the jury to make that connection based solely on speculation and conjecture” (ROA.756-57). It held that the rest of Dr. Rosenfeld’s opinions about Norfolk Southern’s failure to provide a reasonably safe place to work were predicated on his opinions about the exposure, and so were unsupported, too (ROA.757).

Mrs. Lewis then moved the court to reconsider its order (ROA.761, 763), which Norfolk Southern opposed (ROA.1265, 1267), and the court denied (ROA.1290).

Norfolk Southern then moved for summary judgment (ROA.1291), arguing that because Dr. Levin's medical causation opinion was predicated on Dr. Rosenfeld's exposure report, and Dr. Rosenfeld had been excluded, Mrs. Lewis could not offer necessary expert testimony on medical causation, and so her claim failed (ROA.1294-1300). Mrs. Lewis responded (ROA.2181), conceding that "[i]n order to render his causation opinion, Dr. Levin relied upon the opinions of" Dr. Rosenfeld that Norfolk Southern "had a duty to protect [Mr. Lewis] and failed to provide him with a reasonably safe workplace by negligently exposing him to harmful levels of diesel exhaust and benzene in diesel exhaust," and that "the undeniable consequence of" excluding Dr. Rosenfeld "is that [Mrs. Lewis] cannot meet her burden of proof on negligence and foreseeability under the FELA" (ROA.2183).

The trial court then entered a "final summary judgment" in favor of Norfolk Southern (ROA.2185). Mrs. Lewis then timely appealed to this Court (ROA.2189).

## **SUMMARY OF ARGUMENT**

The trial court misapplied the law and so abused its discretion in excluding Dr. Paul Rosenfeld as Mrs. Lewis's liability expert.

To satisfy Florida's standard for expert testimony in an action under the FELA, so long as the ultimate expert testimony is that the railroad's action likely played some role, no matter how small, in causing the injury, the testimony must be admitted. Reliance on lay testimony, review of scientific literature, and use of proxy data are all standard methods to determine exposure and liability.

Dr. Rosenfeld's opinion that Mr. Lewis suffered a substantial exposure to diesel exhaust and benzene during his railroad work, and that Norfolk Southern violated its duty of care to him in failing to mitigate these risks, met these standards and was admissible.

Information Dr. Rosenfeld reviewed showed that over 39 years, Mr. Lewis suffered substantial exposure to these toxins. He then reviewed relevant scientific and Norfolk Southern materials to conclude the railroad should have engaged in industry-standard mitigation, but it did not. He further performed a well-accepted risk assessment to estimate Mr. Lewis's actual exposures. That he lacked exact exposure data or that others may disagree with his reading of studies did not render inadmissible his conclusion that Norfolk Southern violated its duty to Mr. Lewis. Any concerns from those items go to the weight of his testimony, not its admissibility.

## **ARGUMENT**

**The trial court misapplied the law and therefore abused its discretion in excluding Dr. Paul Rosenfeld as Mrs. Lewis's liability expert, and so erred in granting Norfolk Southern summary judgment.**

**A. There are two standards of review: (1) abuse of discretion for granting the motion to exclude, with de novo review of the trial court's application of *Daubert* and the rules of evidence and (2) de novo review of whether there is a genuine issue of fact under the summary judgment record.**

When a trial court excludes a plaintiff's expert and then, for that reason, grants the defendant summary judgment, this Court "employ[s] two standards of review." *Peng v. Citizens Prop. Ins. Corp.*, 337 So. 3d 488, 492 (Fla. 3d DCA 2022).

First, this Court "review[s] a trial court's decision to admit or exclude expert testimony for an abuse of discretion." *Id.* (citations omitted). Still, "a 'court's discretion is limited by the evidence code and applicable case law. A court's erroneous interpretation of these authorities is subject to de novo review.'" *Olesky v. Stapleton*, 123 So. 3d 592, 594 (Fla. 2d DCA 2013) (citation omitted). This includes a "trial court's application of" case law, which "is an interpretation of the law [this Court] review[s] de novo" for whether "the trial court misinterpreted 'applicable case law.'" *Id.* (citation omitted); see also *Magical Cruise Co. Ltd. v. Martins*, 330 So. 3d 993, 1002 (Fla. 5th DCA 2021) (trial court's "erroneous

interpretation of” “the evidence code and applicable case law” when exercising its discretion in determining the admissibility of expert testimony “is subject to de novo review”). So, if in excluding expert testimony a district court incorrectly applies the rules governing the admission of expert testimony to reach that conclusion, it abuses its discretion. *State v. Barber*, 360 So. 3d 1180, 1184-86 (Fla. 2d DCA 2023) (reversing exclusion of expert testimony admissible under the rules).

Second, the Court “employ[s] a de novo review ... of whether the summary judgment record presents a genuine issue of material fact.” *Peng*, 337 So. 3d at 492. “[S]ummary judgment is warranted ‘if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.’” *Cole v. Plantation Palms Homeowners Ass’n, Inc.*, 371 So. 3d 413, 416 (Fla. 2d. DCA 2023) (quoting Fla. R. Civ. P. 1.510(a)). “[T]he burden on the party moving for summary judgment ‘may be discharged by ‘showing’ – that is, pointing out to the [trial] court – that there is an absence of evidence to support the nonmoving party’s case.” *Id.* (citation omitted). “Once the party moving for summary judgment satisfies this initial burden, the burden then shifts to the nonmoving party to come forward with evidence demonstrating that a genuine dispute of material fact exists.” *Id.* (citation omitted).

In a FELA case, a railroad can obtain summary judgment on causation “only in those extremely rare instances where there is a zero probability either of employer negligence or that any such negligence contributed to the injury of an employee.” *Lynch v. N.E. Reg’l Commuter R.R. Corp.*, 700 F.3d 906, 911 (7th Cir. 2012) (quoting *Hines v. Consol. Rail Corp.*, 926 F.2d 262, 268 (3d Cir. 1991)).

## **B. Summary**

The FELA only requires a plaintiff to show a railroad’s negligence played some part, no matter how small, in bringing about his injury. Under the standard from *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993), where a qualified expert testifies based on his knowledge, training, and experience, that the railroad exposed the plaintiff (or here, the decedent) to dangerous carcinogens and breached its duty to him in doing so, that testimony is admissible to prove the plaintiff’s claim. That there may be some arguable flaws in the application of the expert’s methodology goes to the weight of his testimony, not its admissibility.

Here, based on his knowledge, training, and experience, public and environmental health scientist Dr. Paul Rosenfeld concluded to a reasonable degree of scientific certainty that Clarence Lewis was exposed to above background amounts of diesel exhaust and

benzene throughout his employment with Norfolk Southern known to cause cancer, which he was able to determine from scientific literature, lay testimony, and widely accepted proxy data. Dr. Mark Levin, M.D., then concluded that this exposure was a likely cause of Mr. Lewis's CLL. Dr. Rosenfeld also concluded that the railroad failed to monitor, mitigate, or eliminate this exposure when it should have, which failed to comply with government and industry mandates and violated Norfolk Southern's duty of care to Mr. Lewis.

Nonetheless, the trial court excluded Dr. Rosenfeld and therefore granted Norfolk Southern summary judgment. This misapplied the *Daubert* standard and so was an abuse of its discretion.

This Court should reverse the trial court's orders excluding Dr. Rosenfeld's testimony and granting Norfolk Southern summary judgment and should remand this case for trial.

**C. To satisfy *Daubert's* standard for the helpfulness to a jury of expert testimony under the FELA, the expert's opinion only needs to show the FELA's relaxed standard: that the railroad's action likely played a part, no matter how small, in bringing about the plaintiff's injury.**

The trial court excluded Dr. Rosenfeld because it held his methodology of using proxy data to determine Mr. Lewis's exposures to diesel exhaust and benzene were flawed, and methods he used were for lung cancer and not CLL (ROA.754-56). It then

held that his testimony that Norfolk Southern failed to provide Mr. Lewis a reasonably safe place to work were predicated on the exposure opinion, and so could not be admitted, either (ROA.757).

This was an abuse of discretion. The trial court failed to apply correctly the FELA's low standard of causation, Florida's Evidence Code, and *Daubert's* liberal standard for admitting expert opinions.

Dr. Rosenfeld is a qualified expert and relied on studies of exposure involving railroad workers in similar occupations. He based his testimony on those studies, on materials furnished by Mrs. Lewis's counsel, on firsthand accounts from Mrs. Lewis and coworkers of Mr. Lewis, and on his knowledge and experience. He testified that based on this, Mr. Lewis had been exposed to carcinogens during his long railroad work, which caused an excess cancer risk, and there was no safe threshold for those carcinogens. He further testified that Norfolk Southern knew or should have known that this exposure put Mr. Lewis at risk, but took no reasonable mitigation steps to prevent it, violating its standard of care. (And of course, Dr. Levin, who Norfolk Southern did not challenge, testified that the exposures Dr. Rosenfeld recounted were a cause of Mr. Lewis's CLL.)

As the U.S. Supreme Court, Florida courts, and courts throughout the country have well established, this was more than sufficient to meet *Daubert's* standard for admissible expert



testimony, especially given the FELA's low standard of causation. To determine Mr. Lewis's exposures, Dr. Rosenfeld could rely on firsthand accounts, scientific literature and studies, and apply proxy data to model those exposures. The trial court's perceived flaws in Dr. Rosenfeld's analysis go to the weight of his testimony, not its admissibility. The solution for Norfolk Southern, if any, is its competing expert testimony and cross-examination, not exclusion by the court.

The trial court erred in holding otherwise. Its judgment must be reversed and the case remanded for trial.

**1. *Daubert* provides a liberal framework for the admission of expert testimony.**

"Section 90.702, Florida Statutes codifies the *Daubert* standard found in Federal Rule of Evidence 702 and governs the admissibility of expert testimony." *Torrez v. State*, 294 So. 3d 390, 400 (Fla. 4th DCA 2020). Section 90.702 provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact in understanding the evidence or in determining a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify about it in the form of an opinion or otherwise, if:

- (1) The testimony is based upon sufficient facts or data;
- (2) The testimony is the product of reliable principles and methods; and

(3) The witness has applied the principles and methods reliably to the facts of the case.

The Legislature adopted § 90.702 in 2015, but the Supreme Court of Florida then declared it unconstitutional. *See DeLisle v. Crane Co.*, 258 So. 3d 1219, 1229-30 (Fla. 2018). The following year, the Supreme Court adopted the Legislature’s amendments to the Evidence Code as rules of procedure, which formally “chang[ed] the evidentiary standard in Florida from” *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), “to *Daubert*.” *Cook v. State*, 312 So. 2d 926, 932 (Fla. 4th DCA 2021).

Under *Daubert*, “The admissibility standard is a liberal one, and ... the rejection of expert testimony is the exception rather than the rule.” *United States v. Williams*, 684 F. App’x 767, 779 (11th Cir. 2017) (emphasis in the original; citation omitted). When the U.S. Supreme Court decided *Daubert*, federal courts were split of whether *Frye* or the 1972 Federal Rules of Evidence’s standards governed admissibility of expert testimony. *Daubert*, 509 U.S. at 586-87, n.5. The *Frye* test allowed only expert testimony that had “general acceptance in [a] particular field.” 293 F. at 1014.

The U.S. Supreme Court in *Daubert* held the Federal Rules of Evidence superseded *Frye*, so admissibility of scientific evidence no longer was limited to knowledge or evidence “generally accepted” as reliable. 509 U.S. at 588-89. Instead, Rule 702, on which § 90.702

is modeled, mandates trial courts “act as gatekeepers, excluding evidence unless it is reliable and relevant.” *Sanchez v. Cinque*, 238 So. 3d 817, 823 (Fla. 4th DCA 2018) (citation omitted). The trial court must screen novel scientific evidence and conclude it is scientific knowledge that will assist the trier of fact – i.e., that it is relevant. *Daubert*, 509 U.S. at 589-93. The “basic standard of relevance is a liberal one.” *Id.* at 587.

The trial court’s gatekeeping role “entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue.” *Id.* at 592-93. The Court in *Daubert* acknowledged many factors would be instructive to a trial court but focused on four non-exclusive ones: (1) whether the scientific technique can be or has been tested; (2) whether the theory or technique has been subjected to peer review or publication; (3) the known rate of error for the technique or theory and the applicable standards for operation; and (4) whether the technique is generally accepted. *Id.* at 593-94. These factors do not constitute a “definitive checklist or test.” *Id.* at 593.

*Daubert* therefore liberalized *Frye*’s comparatively strict standards for admitting expert testimony. *Id.* at 588. The “Court in *Daubert* actually criticized *Frye* and its ‘exclusive test’ imposing a ‘rigid ‘general acceptance’ requirement’ as being at odds with the

liberal thrust of the Federal Rules and their ‘general approach of relaxing the traditional barriers to ‘opinion’ testimony.’” *Hernandez v. State*, 180 So. 3d 978, 1008 (Fla. 2015) (quoting *Daubert*, 509 U.S. at 588-89).

These standards necessarily cut down a trial court’s discretion to exclude expert testimony, such that under *Daubert* “the rejection of expert testimony is the exception rather than the rule.” *In re Amends. to Fla. Evid. Code*, 278 So. 3d 551, 553 (Fla. 2019) (citation omitted); see also *Royal Caribbean Cruises, Ltd. v. Spearman*, 320 So. 3d 276, 291 (Fla. 3d DCA 2021) (same) (quoting *Vitiello v. State*, 281 So. 3d 554, 560 (Fla. 5th DCA 2019) (same)).

In engaging in the *Daubert* analysis, trial courts are not to weigh or assess the correctness of competing expert opinions. *Peng*, 337 So. 3d at 492-93. *Daubert*’s gatekeeping role “must be careful not to intrude upon the adversary system because ... ‘[v]igorous cross-examination, presentation of contrary evidence, and careful instruction of the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.’” *Id.* at 493 (quoting *Daubert*, 509 U.S. at 596).

“[A]lthough ‘rulings on admissibility under *Daubert* inherently require the trial court to conduct an exacting analysis of the proffered expert’s methodology,’ ... it is not the role of the [trial] court to make ultimate conclusions as to the persuasiveness of the

proffered evidence.” *Quiet Tech. DC-8, Inc. v. Hurel-Dubois UK Ltd.*, 326 F.3d 1333, 1341 (11th Cir. 2003). That there is evidence to counter the expert’s testimony, or that the expert’s opinion came from a biased source, goes to the testimony’s weight, not its admissibility. *See, e.g., Ortiz v. Wiwi*, No. 3:11-cv-33, 2012 WL 4482367, at \*5 (M.D. Ga. Sept. 26, 2012) (collecting cases).

“The trial court, therefore, must be careful not to cross an elusive line between determining admissibility and weighing the evidence.” *Peng*, 337 So. 3d at 493. The trial court in engaging in the *Daubert* analysis does not weigh “the credibility of the expert’s testimony,” but instead only whether it is based on “sufficient facts or data” or was “the product of reliable principles and methods.” *Iarussi v. Iarussi*, 353 So. 3d 75, 78-79 (Fla. 1st DCA 2022). In other words, *Daubert* does not supplant the role of the jury. *Maiz v. Virani*, 253 F.3d 641, 666 (11th Cir. 2001).

Further, *Daubert*’s reliability requirement distinguishes between challenges to a scientific methodology and challenges to that methodology’s *application*. Courts do not exclude expert testimony simply because they find one version of the facts more persuasive than another. *See* Fed. R. Evid. 702, Advisory committee notes (“The emphasis in the amendment on ‘sufficient facts or data’ is not intended to authorize a trial court to exclude an expert’s testimony on the ground that the court believes one version

of the facts and not the other”). Expert testimony must amount to more than “guess or speculation,” but “where the expert testimony has a reasonable factual basis, a court should not exclude it. Rather, it is for opposing counsel to inquire into the expert’s factual basis.” *United States v. 0.161 Acres of Land*, 837 F.2d 1036, 1040 (11th Cir. 1988) (citation omitted).

So, where an expert’s opponent’s arguments “go to the weight of the evidence, rather than to its admissibility,” *Daubert* does not come into play, and the expert’s testimony is admissible. *J.A.R. v. State*, 374 So. 3d 25, 30 (Fla. 4th DCA 2023). That an expert is not highly qualified or has not testified as an expert about a subject before goes to the weight of his testimony, not its admissibility. *Mendelson v. Howard*, 349 So. 3d 449, 451 (Fla. 4th DCA 2022). So, too, does the fact that the expert relied on less information in forming his opinion, as do challenges “to [the] accuracy of [the] expert’s assumptions ....” *Vitiello*, 281 So. 3d at 561.

The fact that the expert relied on his own experience also goes to weight, not admissibility: “[n]othing in [§ 90.702] prohibits expert opinion testimony based on experience.” *State Farm Mut. Auto. Ins. Co. v. Imaging Ctr. of W. Palm Beach, LLC*, 327 So. 3d 323, 326 (Fla. 4th DCA 2021) (quoting *United Auto. Ins. Co. v. Progressive Rehab.*, 324 So. 3d 1006, 1010 (Fla. 3d DCA 2021)). “[T]he plain text of” § 90.702 “provides that experts may be qualified by ‘knowledge, skill,

experience, training, or education.” *United Auto. Ins. Co. v. Cent. Therapy Ctr., Inc.*, 325 So. 3d 252, 255 (Fla. 3d DCA 2021).

When a trial court violates these standards, it abuses its discretion because it “departs from the essential requirements of the law.” *Barber*, 360 So. 3d at 1186. Even in the short time *Daubert* has been in effect in Florida, this Court and other Florida appellate courts have reversed the erroneous exclusion of expert testimony that met its liberal framework many times. *See, e.g.*:

- *Cole*, 371 So. 3d at 416-17 (in breach of contract action, reversing exclusion of expert’s engineering report that was relevant and based on sufficient foundation and reliable methodology);
- *Barber*, 360 So. 3d at 1183-86 (in criminal prosecution, reversing exclusion of State’s toxicology expert where methodology was accepted and challenges went to weight, not admissibility);
- *Holland v. Holland*, 360 So. 3d 1176, 1178-30 (Fla. 5th DCA 2023) (in alimony proceeding, reversing exclusion of wife’s disability expert, where subject matter was relevant and would assist fact-finder, methodology was reliable, and opponent’s challenges “would have been proper fodder for an intense cross-examination of [the expert],” not disqualification);

- *Peng*, 337 So. 3d at 492-94 (in action against insurer for denial of claim, reversing exclusion of engineering expert where methodology was accepted, factual basis was in record, and opponent's counterarguments went to weight, not admissibility);
- *Mendelson*, 349 So. 3d at 451 (in property action, reversing exclusion of expert on attorney fees due to expert's inexperience, which only went to weight, not admissibility);
- *State Farm Mut. Auto. Ins. Co. v. All X-Ray Diagnostic Servs. Corp.*, 338 So. 3d 376, 382-84 (Fla. 3d DCA 2022) (reversing exclusion of medical expert's affidavit about reasonableness of x-rays as pure opinion testimony, where it resulted from application of reliable principles and methods to the facts, stated the factors used and underlying data, and explained the rationale behind expert's methodology and conclusions);
- *State Farm Mut. Auto. Ins. Co. v. Nob Hill Fam. Chiropractic*, 328 So. 3d 1, 6-7 (Fla. 4th DCA 2021) (in action against insurer to recover personal injury benefits, reversing exclusion of both accident reconstructionist and causation expert and medical necessity expert, holding expert need not physically examine insured and nothing indicated the experts' testimony was unreliable);



- *State Farm Mut. Auto. Ins. Co. v. M & E Diagnostic Servs., Inc.*, 327 So. 3d 363, 365-66 (Fla. 3d DCA 2021) (in action against insurer alleging underpayment, reversing exclusion of expert as to reasonableness of provider's charges, where expert attested to his personal knowledge and expertise, his methodology was reliable, and it therefore was "not pure opinion testimony based on speculation or conjecture");
- *Cent. Therapy*, 325 So. 3d at 255-56 (in action against insurer to recovery personal injury benefits, reversing exclusion of insurance adjuster and medical treatment reasonableness experts, as their opinions based on their experience and a review of the evidence were sufficient, were based on education, experience, training, and review of relevant documents, and were "not a speculative, bare assertion");
- *Maines v. Fox*, 190 So. 3d 1135, 1140-42 (Fla. 1st. DCA 2016) (in personal injury action, exclusion of plaintiff's biomechanical engineer expert was error, where his methods were reliable and his reliance on that analysis was a version of factors normally relied on by medical doctors); and
- *Baan v. Columbia Cnty.*, 180 So. 3d 1127, 1133-34 (Fla. 1st. DCA 2015) (in wrongful death action, reversing exclusion of plaintiff's medical causation expert and resulting summary judgment for defendant, where expert's testimony was the

product of reliable principles and methods, which he applied reliably to the facts).

So, given *Daubert*'s liberal admissibility standard, under which a court may not "evaluate the credibility of" experts "or the "persuasiveness of competing scientific studies," but instead only may "ensure that the fact-finder weighs only sound and reliable evidence," *Quiet Tech*, 326 F.3d at 1341, "[i]n close cases involving testimony of debatable reliability," a court should "err in favor of admitting the testimony and allowing opposing counsel to draw out any weaknesses through cross-examination." *Bowers v. Norfolk S. Corp.*, 537 F. Supp. 2d 1343, 1352 (M.D. Ga. 2007), *aff'd*, 300 F. App'x 700 (11th Cir. 2008).

**2. The FELA's low causation standard impacts the *Daubert* analysis as to the helpfulness of the expert's testimony: so long as the expert presents scientifically reliable evidence supporting that the railroad's action likely played some role, however small, in causing the plaintiff's injury, his opinion should be admitted.**

This is an action under the FELA, in which the *Daubert* standards apply to expert testimony just as in any other case. See *Bowers*, 300 F. App'x at 701-02. And expert testimony ultimately is just as necessary to prove causation in a FELA case as in an ordinary injury case. *Moody v. Maine Cent. R.R. Co.*, 823 F.2d 693, 695-96 (1st Cir. 1987).

At the same time, the FELA's remedial nature has a significant effect on how helpful an expert's testimony will be, because its standard of causation is relaxed and low. While neither Florida courts nor the U.S. Court of Appeals for the Eleventh Circuit have analyzed this issue before, other courts throughout the country have. They hold that so long as the expert presents scientifically reliable evidence going to show that the railroad's action likely played some role, however small, in causing the plaintiff's injuries, the testimony should be admitted.

Enacted in 1908, the FELA provides railroad employees a special cause of action for injuries "resulting in whole or in part from" a railroad's negligence "or by reason of any defect or insufficiency, due to its negligence ...." 45 U.S.C. § 51. Congress's purpose in the FELA was humanitarian. *Metro-N. Commuter R.R. Co. v. Buckley*, 521 U.S. 424, 438 (1997). It "uses broad language that, in turn, has been construed even more broadly by th[e Supreme] Court, consistent with its ... intent." *Monessen S.W. Ry. Co. v. Morgan*, 486 U.S. 330, 343 (1988).

The FELA's broad language, "an avowed departure from the rules of the common law, was a response to the special needs of railroad workers who are daily exposed to the risks inherent in railroad work and are helpless to provide adequately for their own safety." *Sinkler v. Mo. Pac. R.R. Co.*, 356 U.S. 326, 329 (1958). It

was “a radical change from the common law in an attempt to assure workers a more sure recovery by abolishing many traditional defenses.” *Poleto v. Conrail*, 826 F.2d 1270, 1278 (3d Cir. 1987). (This was necessary because there is no workers’ compensation for interstate-commerce railroad workers.)

Sixty years ago, the Supreme Court held that given the FELA’s broad language and humanitarian purpose, a railroad is liable so long as its negligence “played any part, even the slightest, in producing the injury.” *Rogers v. Mo. Pac. R.R. Co.*, 352 U.S. 500, 506 (1957). This is because “the FELA is a broad remedial statute,” so the Court “adopted a standard of liberal construction in order to accomplish [Congress’s] objectives ....” *Atchison, Topeka & Santa Fe Ry. Co. v. Buell*, 480 U.S. 557, 562 (1987). As well, “the FELA does not authorize apportionment of damages between railroad and nonrailroad causes.” *Norfolk & W. Ry. Co. v. Ayers*, 538 U.S. 135, 159-60 (2003).

Then, in 2011, after some courts had cut down on this, in *CSX Transp., Inc. v. McBride*, 564 U.S. 685 (2011), the U.S. Supreme Court re-clarified and reapplied this relaxed standard of causation. The railroad there argued that the FELA’s correct causation standard should be ordinary common-law negligence proximate cause. *Id.* at 688. The Court rejected this attempt to increase the plaintiff’s burden of proof. *Id.*

The FELA “does not incorporate ‘proximate cause’ standards developed in nonstatutory common-law actions.” *Id.* Instead, “[t]he charge proper in FELA cases ... simply tracks the language Congress employed, informing juries that a defendant railroad caused or contributed to a plaintiff’s employee’s injury if the railroad’s negligence played any part in bringing about the injury.” *Id.* “Juries in such cases are properly instructed that a defendant railroad ‘caused or contributed to’ a railroad worker’s injury ‘if [the railroad’s] negligence played a part – no matter how small – in bringing about the injury.’” *Id.* at 705.

This means “[t]he standard of causation in an FELA action is a ‘low and liberal’ one that works in favor of submission of issues to the jury ... rather than toward foreclosure through a directed verdict or judgment N.O.V.” *Smith v. Nat’l R.R. Passenger Corp.*, 856 F.2d 467, 469 (2d Cir. 1988). “[I]t is clear that the congressional intent in enacting the FELA was to secure jury determinations in a larger percentage of cases than would be true of ordinary common law actions. In other words, ‘trial by jury is part of the remedy.’” *Boeing Co. v. Shipman*, 411 F.2d 365, 371 (5th Cir. 1969) (citations omitted); *see also Bailey v. Cent. Vt. R.R.*, 319 U.S. 350, 354 (1943) (“To deprive [railroad] workers of the benefit of a jury trial in close or doubtful cases is to take away a goodly portion of the relief which Congress has afforded them”).

Given this relaxed burden to prove merely that the railroad's action played a part, no matter how small, in bringing about the plaintiff's injury, while it certainly does not change how the *Daubert* framework works, it necessarily impacts the substance of expert testimony necessary for it to be helpful to the trier of fact and, therefore, admissible. This is because under the FELA, expert testimony only ultimately needs to reliably show the railroad's action likely played some role, however small, in causing the plaintiff's injuries. If so, the testimony's effect is for the jury.

A leading decision on this is *Hines*, 926 F.2d at 262. In *Hines*, a toxic-exposure FELA case, the Third Circuit reversed a summary judgment predicated on the exclusion of the plaintiff's causation expert. *Id.* at 276. The expert attributed the plaintiff's cancer to PCB exposure while working for the railroad and based his opinions on a medical exam of the plaintiff, personal and family histories, various medical tests, laboratory reports, other treating physicians' reports, and the plaintiff's hospital records and occupational history. *Id.* at 266-67. He also reviewed scientific articles. *Id.*

The Third Circuit held the relaxed FELA standard of causation necessarily impacts the quantum of what an expert must testify for his opinion to be admissible. *Id.* at 268-69. Under the FELA, a medical expert can testify that there was more than one potential cause of a plaintiff's condition. In *Sentilles v.*

*Inter-Caribbean Shipping Corp.*, 361 U.S. 107 (1959), for example, a seaman brought suit under the Jones Act (which specifically incorporates FELA) seeking damages for a tubercular illness that he claimed was caused by an accident that activated or aggravated a latent tubercular condition. None of the three medical witnesses testified that the accident in fact caused the illness. ...

Despite this lack of medical unanimity over the particular cause of the illness, the Court concluded that the differences in testimony did not impair the jury's ability to draw causal inferences. Furthermore, the Court recognized the general reluctance among experts to state that a trauma was the cause of a disease. As the Court explained, "[t]he matter does not turn on the use of a particular form of words by the physicians in giving their testimony," since it is the task of the jury and not the medical witnesses to make a legal determination regarding causation.

*Hines*, 926 F.2d at 268-69 (internal citations omitted).

Therefore, the Third Circuit agreed with the plaintiff "that the standard under FELA can significantly influence a determination of the admissibility of [an expert's] testimony." *Id.* It then held that under the FELA, the expert's testimony was admissible. *Id.* He concluded the PCB exposure was *a* likely cause of the plaintiff's cancer, he was qualified to conclude this, and his methodology – principally relying on other studies – was ordinary and reliable. *Id.* at 275-76.

While *Hines* was decided before *Daubert*, courts have synthesized them holding that in a FELA action:

**as long as the plaintiff's causation expert presents scientifically reliable evidence that the toxic exposure [from the railroad] could have played some role, however small, in causing [his] injuries, the testimony should be admitted.** On the other hand, *Daubert's* standard of admissibility "extends to each step in an expert's analysis all the way through the step that connects the work of the expert to the particular case." [*In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 762 (3d Cir. 1994)]. Thus, if the expert's conclusion – or any inferential link that undergirds it – fails under *Daubert* to provide any evidence of causation, it must be excluded, even under *Hines'* liberal approach to admissibility.

*In re Conrail Toxic Tort FELA Litig.*, No. CIV. A 94-11J, CIV. A 94-4J, 1998 WL 465897 at \*6 (W.D. Pa. Aug 4, 1998) (emphasis added).

(In *Sanchez*, 238 So. 3d at 823, the Fourth District followed *Paoli* in holding "a physical examination and review of medical records may qualify as an acceptable and reliable methodology ....") *See also*:

- *Claar v. Burlington N. R.R. Co.*, 29 F.3d 499, 503 (9th Cir. 1994) ("in FELA cases the negligence of the defendant need not be the sole cause or whole cause of the plaintiff's injuries," so under *Daubert* expert testimony on causation is admissible as long as it "demonstrate[s] some causal connection between a defendant's negligence and their injuries"); and
- *Davis v. ODECO*, 18 F.3d 1237, 1241 (2d Cir. 1994) (under the FELA's standard of proof, expert's testimony that "it is more probable than not that [the plaintiff's] hydrocarbon exposure



played a contributory causal role” in his injury, relying on studies discussing the relationship between hydrocarbon exposure and that injury, while “underwhelming,” was “sufficient”).

**3. A liability expert in a FELA case may reach opinions by review of scientific literature, using his training and experience, and performing an estimation using proxy data, all of which are recognized scientific methodologies.**

When a methodology is accepted as reliable in a court, it remains reliable, and this Court accepts it as such. *J.A.R.*, 374 So. 3d at 30-31 (holding technology found reliable in courts in Nebraska, California, and other jurisdictions was therefore reliable in Florida for *Daubert* purposes).

Dr. Rosenfeld relied on several methodologies in this case, all of which are well-established as reliable scientific methodologies. Norfolk Southern’s challenges and the trial court’s conclusions go to his *application* of those methodologies, not the methodologies themselves, and therefore concern the weight of his testimony, not its admissibility.

First, and obviously, a well-accepted methodology for determining general causation is the review of scientific literature. Numerous Florida decisions have held it is a generally accepted, reliable scientific methodology under *Daubert* to review and draw conclusions from scientific literature. *See Northrop Grumman Sys.*

*Corp. v. Britt*, 241 So. 3d 208, 214-15 (Fla. 3d DCA 2017) (in toxic exposure case, expert's expertise, application of published studies, and general acceptance by scientific community made opinion admissible); *Hawthorne v. State*, 248 So. 3d 1261, 1262-63 (Fla. 1st. DCA 2018) (expert's testimony that his methodology was commonly accepted and based on published studies sufficient and admissible); *Booker v. Sumter Cnty. Sheriff's Off./N. Am. Risk Servs.*, 166 So. 3d 189, 195 (Fla. 1st. DCA 2015) (same). Therefore, "objections to the inadequacy of a [scientific] study are more appropriately considered an objection going to the weight of the evidence rather than its admissibility." *Quiet Tech.*, 326 F.3d at 1341 (citation omitted).

And in reading and drawing conclusions from studies, *Daubert* allows a qualified expert to rely on his expert knowledge, training, experience, and expertise, which is also a reliable methodology. See *M & E Diagnostic*, 327 So. 3d at 365-66; *Imaging Ctr.*, 327 So. 3d at 326; *Progressive Rehab.*, 324 So. 3d at 1010; *Vitiello*, 281 So. 3d at 561; *Northrop*, 241 So. 3d at 214-15.

Similarly, and especially in FELA cases, drawing on a plaintiff's or coworker's testimony to determine a substantial injurious exposure is a well-accepted methodology. See, e.g., *Northrop*, 241 So. 3d at 214-15 (expert could rely on plaintiff's and

other witnesses' recounting of work environment to determine substantial exposure to asbestos). This is because:

while precise information concerning the exposure necessary to cause specific harm to humans and exact details pertaining to the plaintiff's exposure are beneficial, such evidence is not always available, or necessary, to demonstrate that a substance is toxic to humans given substantial exposure and need not invariably provide the basis for an expert's opinion on causation.

*Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 264 (4th Cir. 1999). Rather:

[o]nly rarely are humans exposed to chemicals in a manner that permits a quantitative determination of adverse outcomes .... Human exposure occurs most frequently in occupational settings where workers are exposed to industrial chemicals like lead or asbestos; however, even under these circumstances, it is usually difficult, if not impossible, to quantify the amount of exposure.

*Id.* (citation omitted). In *Westberry*, the Fourth Circuit held an expert could testify talc exposure caused the plaintiff's sinus condition where the plaintiff's own testimony established "a substantial exposure." *Id.*; see also *Bonner v. ISP Techs., Inc.*, 259 F.3d 924, 930-31 (8th Cir. 2001) (precise measurement of worker's chemical exposure unnecessary as long as expert could testify it was substantial enough to cause injury); *Mattis v. Carlon Elec. Prods.*, 295 F.3d 856, 860-61 (8th Cir. 2002) (same).

Instead, under general negligence principles, in a toxic-tort case, “at a minimum ... there must be evidence from which the factfinder can conclude that the plaintiff was exposed to levels of [the toxic agent at issue] that are known to cause the kind of harm that the plaintiff claims to have suffered.” *Id.* at 860. But this can be gleaned just from lay testimony. *Id.*

This is even truer under the FELA, with its even lower standard of proof for causation. *See, e.g.:*

- *Granfield v. CSX Transp., Inc.*, 597 F.3d 474, 475 (1st Cir. 2010) (expert testimony sufficient that plaintiff’s recounting of his repetitious activity caused his “tennis elbow;” affirming admission of expert);
- *Hardyman v. Norfolk & W. Ry. Co.*, 243 F.3d 255, 265 (6th Cir. 2001) (expert testimony sufficient that plaintiff’s recounting of his repetitious activity caused his carpal tunnel syndrome; reversing exclusion of expert);
- *Harbin v. Burlington N. R.R. Co.*, 921 F.2d 129, 132 (7th Cir. 1990) (expert testimony sufficient that plaintiff’s recounting of his exposure to soot injured him; reversing exclusion of expert);
- *Russell v. Ill. Cent. R.R. Co.*, 2015 WL 4039982, at \*6 (Tenn. Ct. App. 2015) (Plaintiff’s liability expert in toxic exposure FELA case was admissible when “[r]elying on the statements of

Illinois Central employees, [he] determined that [the plaintiff] was exposed to asbestos, ETS, and diesel exhaust during the course of his employment”); and

- *Payne v. CSX Transp., Inc.*, 467 S.W.3d 413, 456-57 (Tenn. 2015) (affirming intermediate appellate court’s reversal of exclusion of plaintiff’s liability expert, holding expert could rely on testimony that plaintiff’s exposure to carcinogens at the workplace was “substantial” and “chronic” and that railroad did not mitigate it).

Finally, the use of proxy data based on studies to estimate prior toxic exposures is also a well-accepted methodology. This stems, of course, from the fact that human exposures to toxins often go unrecorded and so it is only up to scientific estimation to show what the exposures were. Courts have noted that “it is fundamentally unfair to require” a toxic-exposure FELA plaintiff to know precise exposure data when the railroad did not monitor environmental quality to begin with:

*See, e.g., Sanders v. CSX Transp.*, 2000 U.S. Dist. LEXIS 22707, at \*16 (S.D.Ga. Feb. 24, 2000) (“If a defendant [railroad] failed to take air samples during the period concerned, ... it hardly makes sense to oblige a plaintiff to produce non-existing data.”); *Fulmore v. CSX Transp., Inc.*, 557 S.E.2d 64, 73 (Ga. Ct. App. 2001) (“It is ironic[ ] that CSX, who failed to follow the recommendations of the [Association of American Railroads] in the 1930s that the air in the work environment be tested, seeks to avoid

liability because the plaintiffs cannot produce the data from the very tests which CSX failed to perform”).

*Payne*, 467 S.W.3d at 457 (format of internal citation modified).

Therefore, it is well-established that relying on studies and proxy values to reconstruct a plaintiff’s or decedent’s exposures to a toxin, especially in a FELA case, is a reliable and accepted methodology. *See, e.g., Hess v. Norfolk S. Ry. Co.*, 795 N.E.2d 91, 108 (Ohio Ct. App. 2003), *reversed in part on other grounds*, 835 N.E.2d 679 (Ohio 2005).

In *Hess*, a liability expert testified as to a FELA plaintiff’s estimated asbestos exposure based on proxy background values, which “never were published, peer reviewed, or tested by others,” and the plaintiff’s causation expert relied on that testimony in determining the exposures caused the plaintiff’s injury. *Id.* at 107. The railroad argued this rendered his testimony inadmissible. *Id.* But the railroad offered no evidence that this was unreliable other than its mere criticisms of the plaintiff’s expert:

Although [the railroad] argues that [the expert]’s background values are unreliable, it offers no evidence to demonstrate what a reliable method to determine background values would be. [The railroad] had the opportunity to produce its own experts to counter the opinion of [the expert], either by opposing his methods, procedures, population sample, or by producing results of different background values to support the claim that [his] values were unreliable. [The railroad] produced no such evidence.

*Id.* at 108. The court rejected “[t]he assertion that [the expert]’s findings are unreliable because they are not peer-tested, without a showing of reliable, peer-tested evidence to the contrary ....” *Id.*; see also *Langrell v. Union Pac. R.R. Co.*, No. 8:18CV57, 2020 WL 3037271 at \*8-10 (D. Neb. June 5, 2020) (refusing to exclude expert estimation of employee’s exposure to diesel exhaust and other carcinogens based on studies of railroad workers and similar occupations).

**D. Dr. Rosenfeld’s testimony that Norfolk Southern violated its duty of care to Mr. Lewis because it exposed Mr. Lewis to a level of carcinogenic toxins during his railroad work and failed to take expected steps to mitigate this satisfied *Daubert*’s standard for expert testimony and was admissible.**

Under these standards, and just as in the decisions cited above, Dr. Rosenfeld’s opinion that Mr. Lewis was substantially exposed to the carcinogens diesel exhaust and benzene during his railroad work, which increased his risk of cancer, and that Norfolk Southern violated its duty of care to him when it failed to mitigate this, was admissible expert testimony. Dr. Rosenfeld was qualified, and his conclusion was trustworthy enough to assist the jury. “Regardless of whether the trier of fact ultimately accepts [his] conclusions,” “the trial court could not reasonably find that” his opinion was “purely based on [his] own personal experience or

otherwise ... impermissible 'pure opinion' testimony." *All X-Ray*, 338 So. 3d at 384.

That Dr. Rosenfeld extrapolated estimated exposure levels by proxy guided by scientific studies does not change this. Especially given Dr. Rosenfeld's testimony, based on scientific studies, of the general acceptance that diesel exhaust and benzene cause cancer, and especially under the FELA, those issues go only to the weight of his testimony, not its admissibility. He testified reliably based on well-accepted sources that Mr. Lewis was substantially exposed to carcinogens, the levels to which he was exposed presented an increased cancer risk, and the railroad should have mitigated this but did not. And notably, as in *Hess*, the railroad did not introduce any contrary evidence showing how a different, reliable method would be, and how it would show a different result.

In concluding otherwise, the trial court violated *Daubert's* liberal admission standards by "intrud[ing] upon the adversary system" in "weighing the testimony of [Dr. Rosenfeld] rather than limiting itself to an examination of its admissibility." *Peng*, 337 So. 3d at 493-94. Just as in *Peng* and the other decisions cited above at pp. 30-32, its decision to exclude Dr. Rosenfeld was an abuse of discretion and must be reversed.



**1. Dr. Rosenfeld did not opine on causation, only exposure and liability.**

In its order excluding Dr. Rosenfeld, the trial court stated, “At core, all of [Dr. Rosenfeld’s] opinions build off his conclusion that [Mr. Lewis] was exposed to a harmful level of diesel fumes over the course of his career with [Norfolk Southern] *and that exposure was the cause of him developing CLL*” (ROA.755) (emphasis added).

Later, it stated, “absent reliable evidence *to support causation based on exposure levels*, Dr. Rosenfeld[] cannot support his hypothesis that the safety measures referenced would have prevented or reduced the risk of [Mr. Lewis]’s CLL” (ROA.757) (emphasis added).

While Dr. Rosenfeld concluded Mr. Lewis was exposed to negligent and harmful levels of diesel exhaust and benzene over the course of his career, Dr. Rosenfeld *did not* opine as to causation in his report or deposition testimony. In his report, Dr. Rosenfeld did not conclude that Norfolk Southern’s negligence *caused* any type of harm to Mr. Lewis. Rather, he testified to what Mr. Lewis’s exposures *were*, that they were dangerous, and that Norfolk Southern violated its duty of care to Mr. Lewis in not engaging in mitigation of those conditions it knew or should have known were dangerous.

To the contrary, it was *Dr. Levin* – who Norfolk Southern never challenged – who would have testified that the exposures Dr.

Rosenfeld recounted Mr. Lewis suffered were a likely cause, no matter how small, of his CLL (ROA.1334). Instead, Dr. Rosenfeld's purpose, as with all liability experts in cases like this, was to satisfy Mrs. Lewis's burden to demonstrate liability for failing to provide Mr. Lewis a reasonably safe workplace by exposing Decedent to toxic substances and failing to mitigate those exposures.

As well, Mrs. Lewis did not offer Dr. Rosenfeld's opinion as to engineering controls and safety measures for any causation purpose. Under the FELA, Norfolk Southern's non-delegable duty to provide a reasonably safe workplace included the duty to mitigate exposures by implementing engineering controls and safety measures. *Pehowic v. Erie Lackawanna R.R. Co.*, 430 F.2d 697, 700 (3d Cir. 1970). Dr. Rosenfeld was not opining that a mitigation of exposures would have reduced the risk of or prevented Mr. Lewis's CLL. That, too, was Dr. Levin's purview. Instead, Dr. Rosenfeld testified only that Norfolk Southern breached its non-delegable duty by failing to implement those engineering controls and safety measures.

**2. Even outside his estimation of Mr. Lewis's exposures, Dr. Rosenfeld reliably testified that Mr. Lewis suffered a substantial exposure to diesel exhaust and benzene, which Norfolk Southern violated its duty of care to him in failing to mitigate.**

Of the § 90.702 factors, the first two – that the subject is one needing expert testimony and that Dr. Rosenfeld is qualified – are not in dispute. Mrs. Lewis concedes that proving Norfolk Southern breached its duty of care to her late husband requires expert testimony. And Dr. Rosenfeld's advanced degrees, licensures, certifications, and positions (ROA.38-39, 171-72, 177) easily qualify him as an expert. Neither Norfolk Southern nor the trial court suggested otherwise.

Instead, as in *Peng*, the only factor in dispute is whether Dr. Rosenfeld's conclusion "had the requisite scientific basis for reliability under *Daubert*." 337 So. 3d at 494. The key inquiry is whether it was "based on a reliable methodology – and not ... speculative." *Id.* at 493.

Dr. Rosenfeld began with an overview of Mr. Lewis's exposures as recounted by his widow and coworkers in the Simpson Yard (ROA.40-44). They detailed that both as a switchman and then an engineer running trains to and from Macon, Georgia, Mr. Lewis was exposed to visual and smellable diesel exhaust every day both on trains and from those idling in the yard and left running inside the

shop, would get diesel fuel and diesel exhaust on his clothes and hair, and was also by diesel fuel spills that would cause fumes to leach up from the ground (ROA.40-44). At the same time, Norfolk Southern never had its employees use respirators in the yard or wearing respirators during her career, nor did it ever train or advise them to wear one (ROA.40-44).

Relying on the testimony of the plaintiff and coworkers is a standard methodology for determining exposures to carcinogens. Indeed, it is well-established that where evidence an expert reviews indicates a plaintiff suffered a “substantial exposure” to a toxin, even if it is just the plaintiff’s own testimony and is not precisely quantifiable, an expert can rely on that in determining this was so. *See, e.g., Northrop*, 241 So. 3d at 214-15 (plaintiff’s recounting of his work condition at facility was sufficient predicate for expert’s conclusion that he was substantially exposed to asbestos to cause mesothelioma); *Westberry*, 178 F.3d at 264 (same re: airborne talc exposure); *Clausen v. M/V New Carissa*, 339 F.3d 1049, 1059 (9th Cir. 2003) (same re: description of oil spill); *Bonner*, 259 F.3d at 930-31 (same re: description of amount and duration of chemical exposure); *Mattis*, 295 F.3d at 860-61 (same); *Hardyman*, 243 F.3d at 265 (same re: description of repetitive work for carpal tunnel syndrome).

This was enough to show Mr. Lewis was substantially exposed to diesel exhaust and benzene, carcinogens known to cause cancer. The jury ultimately could rely on this, and so could Dr. Rosenfeld.

And as Norfolk Southern did not monitor air quality and benzene exposure during Mr. Lewis's 39 years working in the Simpson Yard, Dr. Rosenfeld reasonably relied on the recollections of Mrs. Lewis and Mr. Lewis's coworkers to detail the exposures Mr. Lewis suffered.

Next, Dr. Rosenfeld went through the history of both general scientific and railroad industry knowledge that diesel exhaust and benzene caused increased cancer risk in railroad workers (ROA.67-113). By the time Mr. Lewis worked for Norfolk Southern from 1975 to 2014, it was well known in the industry that exposure to diesel exhaust and benzene caused increased cancer risk in railroad workers (ROA.67-113). And Dr. Rosenfeld explained, per NIOSH guidelines, that there was no safe level of diesel exhaust exposure when it came to cancer risk (ROA.67-69). Dr. Rosenfeld then examined Norfolk Southern's internal documentation to determine whether it adopted any mitigation of diesel exhaust and benzene, such as preventing locomotives from idling or requiring respirators, air conditioning in cabs, or other policies (ROA.65-72). He determined that not only did they have no mitigation, but as late as

2006 were still disputing to their employees whether there was any cancer risk from diesel exhaust at all (ROA.65-69).

As in *Payne*, Dr. Rosenfeld properly used this internal data to opine that Mr. Lewis was substantially exposed to diesel exhaust and benzene during his railroad work, which Norfolk Southern knew or should have known to be dangerous, but Norfolk Southern took no steps to mitigate that (ROA.134-35).

Therefore, at the outset, even if the trial court somehow correctly excluded Dr. Rosenfeld's proxy extrapolation of Mr. Lewis's actual potential exposures, as in *Payne* and the other decisions discussed above at pp. 43-44, this conclusion is still admissible. That is, from the testimony of his wife and coworkers, basic scientific literature on the carcinogenicity of diesel exhaust and benzene, and Norfolk Southern's total failure to mitigate this, Dr. Rosenfeld plainly reliably could conclude: (1) that Mr. Lewis suffered a substantial exposure to diesel exhaust and benzene, (2) that Norfolk Southern knew or should have should have known this was dangerous and potentially carcinogenic, and that (3) Norfolk Southern failed its non-delegable duty to mitigate these through standard industry methods.

Dr. Rosenfeld was entitled to rely on the testimony of Mrs. Lewis and Mr. Lewis's coworkers. He was also entitled to rely on scientific literature – and his own experience and expertise – about

the well-known risk of cancer from diesel exhaust and benzene exposure in the railroad industry before and during when Mr. Lewis worked for Norfolk Southern. He was further entitled to rely on Norfolk Southern's internal safety guidelines showing that they did nothing to mitigate that exposures.

As with the evidence in *Westberry*, *Clausen*, *Bonner*, *Mattis*, and *Hardyman*, Dr. Rosenfeld's detailed recounting of Mr. Lewis's working conditions and exposures was more than a sufficient recounting of substantial exposure on which Mrs. Lewis's causation expert Dr. Levin could predicate his conclusions that the exposures were likely causes of Mr. Lewis's CLL.

Therefore, as in *Payne* and the other decisions cited above, even outside his scientific estimation of the amount of Mr. Lewis's exposure, it was entirely proper for Dr. Rosenfeld to testify based on these that Mr. Lewis suffered a substantial exposure to the carcinogens diesel exhaust and benzene, and that Norfolk Southern violated its duty of care when it failed to mitigate that exposure. The trial court misapplied the *Daubert* standard and therefore abused its discretion in holding otherwise.

**3. Dr. Rosenfeld performed a proper estimation of Mr. Lewis's exposures based on testimony and scientific studies.**

As to the estimation Dr. Rosenfeld performed, he stated that the methodology he used was also used by all four branches of the U.S. military, the CDC. and the EPA (ROA.48-49). This was the Integrated Risk Information System ("IRIS"), which resulted in a demonstrative health risk assessment that articulates prior work exposures (ROA.48).

First, using an EPA guidelines equation, he quantified the chronic daily intake for exposed workers in Mr. Lewis's position (ROA.50-51). Then, he calculated a range of worker inhalation cancer risk values by taking the various chronic daily intake levels calculated in the previous step and multiplying them by the EPA-recommended diesel exhaust inhalation unit risk (ROA.52-53). To do so, he used empirical data in peer-reviewed literature to compare elemental carbon levels from similar workers employed in similar work environments and calculate diesel particulate matter levels for his risk assessment (ROA.54-56). This resulted in a table and graph of the worker inhalation cancer risk of diesel exhaust at varying levels and at varying exposure durations (ROA.60-61). From this, Dr. Rosenfeld was able to estimate Mr. Lewis's diesel exhaust exposures and conclude that at 39 years on the railroad,



Mr. Lewis had a substantially increased risk of developing cancer (ROA.63-64).

The trial court excluded Dr. Rosenfeld's entire opinion based on this, first because it found his methodology was not subject to peer review or publication (ROA.755-56). This is untrue. In fact, Dr. Rosenfeld himself has been peer-reviewed performing this exact risk assessment methodology to quantify the cancer risk posed to railroad workers due to occupational inhalation exposure to diesel exhaust. See Rosenfeld, P.E., Spaeth, K.R., Hallman, R. *et al.*, *Cancer Risk and Diesel Exhaust Exposure Among Railroad Workers.*, WATER AIR SOIL POLLUT. 233, 171 (2022), available at <https://doi.org/10.1007/s11270-022-05651-4>.

Next, the court found Dr. Rosenfeld's methodology was not validated for assessing risks associated with developing CLL due to diesel exhaust exposure, and instead he had to use literature for CLL risks and not other kinds of cancer (ROA.755-56). At the outset, this misapplied the *Daubert* standard, because Dr. Rosenfeld was not opining on causation, but rather that according to guidelines from NIOSH and the EPA, Norfolk Southern did not provide Mr. Lewis with a reasonably safe workplace as the FELA requires. Indeed, in her motion to reconsider, Mrs. Lewis showed that Dr. Rosenfeld's exact methodology from the EPA had been used

to weigh cancer risk in cancers outside of lung cancer (ROA.779-81).

Moreover, Dr. Rosenfeld testified that this methodology is standard and well-established for cancer risk generally, not just lung cancer (ROA.244-45, 297-98, 303-04). Indeed, some of the studies in his report itself, and on which he relied, concerned cancer besides lung cancer (ROA.88, 90). He testified and showed that this methodology was well-established and accepted by numerous agencies and for any kind of cancer assessment. Norfolk Southern introduced no evidence to the contrary.

Indeed, in the context of diesel exhaust, it is the increased risk of *any* type of injury from exposure that creates the unsafe working condition and triggers the duty to mitigate employees' exposures that created the unsafe working condition. The question is whether Norfolk Southern improved the unsafe working condition to the extent reasonably feasible by implementing available mitigation. The mitigation efforts did not need to correlate to a reduction of the risk of developing a specific type of cancer such as CLL, but instead should have reliably correlated to reducing his exposure to the unsafe condition – diesel exhaust – to a reasonably feasible extent.

Finally, the court held Dr. Rosenfeld's methodology itself was unreliable because, "In testimony, Dr. Rosenfeld concedes the generally accepted method for calculating diesel exhaust/diesel

particulate matter ('DPM') through rough measurement of elemental carbon ('EC') and comparing those results to exposure guidelines," but "Dr. Rosenfeld instead converted EC levels to DPM, which is apparently unique to his personal methodology" (ROA.756). It held the literature did not support this, and "[f]urther, Dr. Rosenfeld appears to have relied on EC level data not correlated to" Mr. Lewis," which "renders Dr. Rosenfeld's most foundational opinion, Decedent's exposure level, unreliable under the *Daubert* inquiry" (ROA.756).

As Dr. Rosenfeld explained, however, this is simply incorrect. To the contrary, the conversion methodology Dr. Rosenfeld used is derived from peer-reviewed published papers, governmental documents, and other reliable information sources. Dr. Rosenfeld related EC values to DPM values by using data derived from multiple peer-reviewed studies regarding the mass of EC in DPM. This methodology followed the EPA's recommendation for its risk assessment tool to relate EC values to DPM values by using data derived from multiple peer-reviewed studies regarding the mass of EC in DPM. See US EPA (2002), Health Assessment Document for Diesel Engine Exhaust. PDF pg. 130. [https://ordspub.epa.gov/ords/eims/eimscomm.getfile?p\\_download\\_id=36319](https://ordspub.epa.gov/ords/eims/eimscomm.getfile?p_download_id=36319). The EPA further stated, "Because of the large portion of EC in DPM, and the fact that DE is one of the major contributors to

EC in many ambient environments, DPM concentrations can be bounded using EC measurements.” *Id.* Dr. Rosenfeld’s methods relied on peer-reviewed literature that either used the NIOSH method or its appropriate equivalent. He did not just create this out of whole cloth, as the trial court suggested.

Similarly, when converting from EC levels to DPM, Dr. Rosenfeld relied on published literature and its own conversion numbers (ROA.51-54). He used the empirical data in peer-reviewed literature to compare elemental carbon levels from similar workers employed in similar work environments and calculate diesel particulate matter levels for his risk assessment (ROA.54-56). In holding that the published literature did not contain consistent rates for this, the trial court erred in weighing Dr. Rosenfeld’s testimony and not merely judging its acceptance. In her motion to reconsider, Mrs. Lewis cited numerous studies showing those comparison rates, including some on which Dr. Rosenfeld relied (ROA.776-78).

Notably, as in *Hess*, Norfolk Southern criticized Dr. Rosenfeld’s application of his methodology and his conclusions but offered nothing to the contrary. It offered no evidence to demonstrate what a supposedly reliable method to determine Mr. Lewis’s exposure would be, and show conversely that he suffered no

substantial exposure to diesel exhaust or benzene capable of posing an increased cancer risk.

This is because, plainly, Dr. Rosenfeld used an accepted methodology to determine that Mr. Lewis suffered dangerous exposures to diesel exhaust and benzene during his railroad work. He was able to properly conclude per the FELA that Norfolk Southern knew or should have known about the dangers of this exposure, activating its duty to guard Mr. Lewis from those dangers. But Norfolk Southern did not, and violated that duty of care.

The trial court's and Norfolk Southern's criticisms go to the adequacy of the studies and resulting methodology Dr. Rosenfeld used. But those only go to the weight of his testimony, not its admissibility, because they are merely "objections to the inadequacy of a [scientific] study," which are "an objection going to the weight of the evidence rather than its admissibility." *Quiet Tech.*, 326 F.3d at 1341 (citation omitted).

Dr. Rosenfeld's conclusion was that Norfolk Southern failed to provide Mr. Lewis a safe workplace. His methodology to reach that conclusion was accepted and reliable. Under the *Daubert* standard, any concerns from Dr. Rosenfeld's lack of information about Mr. Lewis's precise amount of exposure or the sources from which he obtained his information go to the weight of his testimony, not its admissibility. Norfolk Southern's and the trial court's criticisms go

to the *application* of the well-accepted methodologies he used, and so just to the weight of his opinion.

Norfolk Southern's concerns are "proper fodder for an intense cross-examination of Dr. [Levin], but they do not demonstrate a basis for disqualification under *Daubert*." *Holland*, 360 So. 3d at 1180. The remedy is the adversarial process, not exclusion. *Daubert*, 509 U.S. at 590, 596. This case is not the "extremely rare instanc[e] where there is a zero probability either of employer negligence or that any such negligence contributed to the injury of an employee." *Lynch*, 700 F.3d at 911 (citation omitted).

The trial court misapplied § 90.702 and *Daubert* in excluding Dr. Rosenfeld, and therefore abused its discretion. This Court should reverse the trial court's judgment and remand this case for trial.

## **CONCLUSION**

The Court should reverse the trial court's judgment and remand this case for trial.

Dated: October 1, 2024

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that on October 1, 2024, I electronically filed the foregoing with the Clerk of the Court by using the E-Filing Portal, which will send a notice of the electronic filing to the following: Patrick M. Horvat, Esquire at pmhorvat@burnswhite.com, and Jeffrey A. Jackson, Esquire at jajackson@burnswhite.com, Burns White, 48 26th Street, Pittsburgh, Pennsylvania 15222, and Andrew J. Knight II, Esquire, ajknight@mppkj.com, Moseley Prichard Parrish Knight & Jones, 501 West Bay Street, Jacksonville, Florida 32202.

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**CERTIFICATE OF COMPLIANCE FOR COMPUTER GENERATED  
BRIEF (Fla. R. App. P. 9.045)**

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/s/Jonathan Sternberg

Jonathan Sternberg

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