

IN THE COURT OF APPEALS OF NORTH CAROLINA

No. COA15-1144

Filed: 2 August 2016

Caldwell County, No. 12 CRS 50686

STATE OF NORTH CAROLINA

v.

LARRY WILLIAM ABRAMS

Appeal by defendant from judgments entered 27 May 2015 by Judge Robert C. Ervin in Caldwell County Superior Court. Heard in the Court of Appeals 27 April 2016.

Attorney General Roy Cooper, by Assistant Attorney General Deborah M. Greene, for the State.

Leslie Rawls for defendant-appellant.

CALABRIA, Judge.

Larry William Abrams (“defendant”) appeals from judgments entered upon jury verdicts finding him guilty of possession with intent to sell or deliver marijuana, intentionally maintaining a building to keep controlled substances, and possession of drug paraphernalia. We conclude defendant received a fair trial, free from error.

I. Background

During a traffic stop on 13 February 2012, Willie Cloninger (“Cloninger”) consented to deputies of the Caldwell County Sheriff’s Department (“CCSD”) searching his vehicle. He told CCSD that he had four ounces of marijuana under his

seat and agreed to make undercover buys for them. Cloninger made three buys at defendant's home. After each buy, Cloninger met with the officers and returned the purchased substances to them.

James Ferguson also cooperated with the CCSD. When his home was raided, he admitted to purchasing marijuana from defendant for the past nine months. Subsequently, CCSD executed a search warrant on defendant's home and recovered, *inter alia*, "[f]ive Ziploc bags of green vegetable plant matter" and various other containers of plant material. Georgiana Baxter ("Agent Baxter"), a special agent with the North Carolina State Bureau of Investigation ("SBI") and a forensic scientist with the North Carolina State Crime Lab ("NC Lab") in the Western Regional Laboratory ("WRL") in Asheville, tested the plant matter recovered from defendant's home and concluded that it was marijuana. Defendant was charged with, *inter alia*, possession with intent to sell or deliver marijuana, intentionally maintaining a building to keep controlled substances, and possession of drug paraphernalia.

At trial, the State tendered Agent Baxter as an expert witness. Agent Baxter currently serves as a forensic scientist supervisor in the chemistry section of the NC Lab in WRL, where she has worked for nearly fourteen years. She has completed the specialized "in-house training program through the [NC Lab] dealing with all aspects of forensic drug analysis" and was certified by the American Board of Criminalistics in the area of forensic drug analysis. As of the date she testified, Agent Baxter had

been previously tendered and admitted as an expert approximately eighty-seven times to give her opinion as to whether a substance was a controlled substance.

Agent Baxter testified that she examined the plant material recovered from defendant's residence pursuant to the procedures set forth by NC Lab for analyzing and identifying marijuana. Those procedures called for an analyst to separate the vegetable material from its packaging and record its weight; conduct a visual inspection of the material with the naked eye; conduct an inspection of the material under a microscope; and then conduct a chemical test to determine the presence of tetrahydrocannabinol ("THC"), the active component of marijuana. After conducting this analysis on the vegetable material recovered from defendant's home, Agent Baxter concluded that it was marijuana.

On 27 May 2015, a Caldwell County jury returned verdicts finding defendant guilty of possession with intent to sell or deliver marijuana, intentionally maintaining a building to keep controlled substances, and possession of drug paraphernalia. The trial court sentenced defendant to a 60-day active sentence to be served in the custody of the Sheriff of Caldwell County, as well as a minimum of 6 months and a maximum of 17 months to be served in the North Carolina Division of Adult Correction, where he was placed on supervised probation for 30 months with monetary and special conditions of probation. Defendant appeals.

II. Identification of Marijuana

Defendant argues the trial court abused its discretion by admitting expert testimony identifying the substance recovered from his home as marijuana, in violation of the new reliability inquiry imposed by amended Rule 702(a) of the North Carolina Rules of Evidence. We disagree.

A. Expert Testimony, the *Daubert* Standard

As an initial matter, “North Carolina is now a *Daubert* state.” *State v. McGrady*, __ N.C. __, __, __ S.E.2d __, __, 2016 N.C. LEXIS 442, at *13 (2016). Rule 702(a) governs the admission of expert witness testimony. In 2011, our General Assembly amended Rule 702(a) to reflect its federal counterpart, which itself was amended in 2000 in response to the standard articulated in *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 125 L.Ed.2d 469, 113 S.Ct. 2786 (1993) and later clarified in *General Electric Co. v. Joiner*, 522 U.S. 136, 139 L.Ed.2d 508, 118 S.Ct. 512 (1997) and *Kumho Tire. Co. v. Carmichael*, 526 U.S. 137, 143 L.Ed.2d 238, 119 S.Ct. 1167 (1999). *McGrady*, __ N.C. at __, __ S.E.2d at __, 2016 N.C. LEXIS 442, at *7.

Our Supreme Court recently interpreted the 2011 amendment to Rule 702(a) to “adopt[] the federal standard for the admission of expert witness testimony articulated in the *Daubert* line of cases[,]” and held that “the meaning of North Carolina’s Rule 702(a) now mirrors that of the amended federal rule.” *Id.* at __, __ S.E.2d at __, 2016 N.C. LEXIS 442, at *6.

B. Standard of Review

We review a trial court's ruling on the admissibility of expert testimony pursuant to Rule 702(a) for an abuse of discretion. *Id.* at __, __ S.E.2d at __, 2016 N.C. LEXIS 442, at *22. "[A] trial court may be reversed for abuse of discretion only upon a showing that its ruling was manifestly unsupported by reason and could not have been the result of a reasoned decision." *Id.* at __, __ S.E.2d at __, 2016 N.C. LEXIS 442, at *22 (quoting *State v. Riddick*, 315 N.C. 749, 756, 340 S.E.2d 55, 59 (1986)).

In reviewing a trial court's application of Rule 702(a), our Supreme Court instructed:

To determine the proper application of North Carolina's Rule 702(a) . . . [the reviewing court] must look to the text of the rule, to [*Daubert*, *Joiner*, and *Kumho*], and also to our existing precedents, as long as those precedents do not conflict with the rule's amended text or with *Daubert*, *Joiner*, and *Kumho*.

Id. at __, __ S.E.2d at __, 2016 N.C. LEXIS 442, at *14.

C. Discussion

Rule 702(a) provides in pertinent part:

(a) If scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion, or otherwise, if all of the following apply:

(1) The testimony is based upon sufficient facts or data.

(2) The testimony is the product of reliable principles and methods.

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

N.C. Gen. Stat. § 8C-1, Rule 702(a) (2015). Inquiry under the amended Rule 702(a) still involves a “three-step framework—namely, evaluating qualifications, relevance, and reliability[.]” *McGrady*, __ N.C. at __, __ S.E.2d at __, 2016 N.C. LEXIS 442, at *20, and “expert testimony must satisfy each to be admissible.” *Id.* at __, __ S.E.2d at __, 2016 N.C. LEXIS 442, at *14. In the instant case, defendant does not dispute Agent Baxter’s credentials nor the relevance of her testimony, but challenges its reliability.

1. Reliable Principles and Methods

Defendant contends Agent Baxter’s testimony was not “the product of reliable principles and methods[.]” in violation of Rule 702(a)(2), on the basis that “the State did not present any testimony relating to [*Daubert*’s] five factors. Nor did it present any other support for the reliability of the test Baxter used to determine the nature of the vegetable matter.” We disagree.

Regarding *Daubert*’s and other particular factors a trial court may consider when determining reliability, our Supreme Court explained:

In the context of scientific testimony, *Daubert* articulated five factors from a nonexhaustive list that can have a bearing on reliability: (1) “whether a theory or

technique . . . can be (and has been) tested”; (2) “whether the theory or technique has been subjected to peer review and publication”; (3) the theory or technique’s “known or potential rate of error”; (4) “the existence and maintenance of standards controlling the technique’s operation”; and (5) whether the theory or technique has achieved “general acceptance” in its field. *Daubert*, 509 U.S. at 593-94. When a trial court considers testimony based on “technical or other specialized knowledge,” N.C. R. Evid. 702(a), it should likewise focus on the reliability of that testimony, *Kumho*, 526 U.S. at 147-49. The trial court should consider the factors articulated in *Daubert* when “they are reasonable measures of the reliability of expert testimony.” *Id.* at 152. Those factors are part of a “flexible” inquiry, *Daubert*, 509 U.S. at 594, so they do not form “a definitive checklist or test,” *id.* at 593. And the trial court is free to consider other factors that may help assess reliability given “the nature of the issue, the expert’s particular expertise, and the subject of his testimony.” *Kumho*, 526 U.S. at 150.

The federal courts have articulated additional reliability factors that may be helpful in certain cases, including:

- (1) Whether experts are proposing to testify about matters growing naturally and directly out of research they have conducted independent of the litigation, or whether they have developed their opinions expressly for purposes of testifying.
- (2) Whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion.
- (3) Whether the expert has adequately accounted for obvious alternative explanations.
- (4) Whether the expert is being as careful as he would be in his regular professional work outside his paid litigation consulting.

(5) Whether the field of expertise claimed by the expert is known to reach reliable results for the type of opinion the expert would give.

Fed. R. Evid. 702 advisory committee's note to 2000 amendment (citations and quotation marks omitted). In some cases, one or more of the factors that we listed in *Howerton* may be useful as well. *See Howerton [v. Arai Helmet, Ltd.]*, 358 N.C. [440,] 460, 597 S.E.2d [674,] 687 [(2004)] (listing four factors: use of established techniques, expert's professional background in the field, use of visual aids to help the jury evaluate the expert's opinions, and independent research conducted by the expert).

Whatever the type of expert testimony, the trial court must assess the reliability of the testimony to ensure that it complies with the three-pronged test in Rule 702(a)(1) to (a)(3). The court has discretion to consider any of the particular factors articulated in previous cases, or other factors it may identify, that are reasonable measures of whether the expert's testimony is based on sufficient facts or data, whether the testimony is the product of reliable principles and methods, and whether the expert has reliably applied those principles and methods in that case. *See Kumho*, 526 U.S. at 150-53.

McGrady, __ N.C. at __, __ S.E.2d at __, 2016 N.C. LEXIS 442, at *18-20 (footnotes omitted). In addition, our Supreme Court emphasized that "Rule 702(a), as amended in 2011, does not mandate particular 'procedural requirements for exercising the trial court's gatekeeping function over expert testimony.'" *Id.* at __, __ S.E.2d at __, 2016 N.C. LEXIS 442, at *22 (quoting Fed. R. Evid. 702).

In the instant case, Agent Baxter's testimony established that she analyzed the vegetable matter recovered from defendant's home in accordance with the

procedures for identifying marijuana employed by NC Lab at the time. Regarding Rule 702(a)(2), the reliability of the “principles and methods” employed, Agent Baxter explained that when identifying a substance as marijuana:

The first thing that I’m going to do . . . is . . . separate any weighable material from its packaging that I receive it in. So I want the weight of just the material itself. I’m going to record that weight. At that point, I’m going to proceed with my analysis, conducting some type of preliminary analysis, whether that be a color test. In this particular case, with plant material, it’s going to include a microscopic examination as well. After that, I’m going to do some type of chemical analysis to confirm the identification.

Regarding the microscopic exam, Agent Baxter explained in greater detail:

There’s basically four characteristics that we’re looking for with marijuana. They have unique characteristics about their leaves. They have particular types of hairs that grow on those leaves. The stems of marijuana plants aren’t rounded like a lot of tree, or you know, other types of plant material. They’re fluted so . . . they’re almost square, with concave edges. The seeds of the marijuana plant are very unique in that they are mottled, which means they look like little turtles’ backs. So those are the kinds of things that we’re looking for when we look under the microscope.

Regarding the chemical analysis, Agent Baxter explained that she conducted

what is referred to as a Duquenois-Levine color test[, which is] a chemical test that reacts with certain compounds. In this case, it reacts with certain cannabinoids, such as THC, which is the active component in marijuana.

Based on her detailed explanation of the systematic procedure she employed to identify the substance recovered from defendant’s home, a procedure adopted by

the NC Lab specifically to analyze and identify marijuana, her testimony was clearly the “product of reliable principles and methods” sufficient to satisfy the second prong of Rule 702(a), and the trial court did not abuse its discretion in admitting this testimony. We overrule defendant’s challenge.

2. Application of Reliable Principles and Methods

Defendant next contends Agent Baxter’s testimony did not establish that she “applied the principles and methods reliably to the facts of the case[.]” in violation of Rule 702(a)(3). We disagree.

Agent Baxter testified that “we handle every case the same. We only work one item of evidence at a time, so as to prevent any type of cross-contamination during analysis.” Agent Baxter received five bags of vegetable matter for testing, and explained:

Based on our sampling procedures at that time, . . . I was required to randomly select three of those plastic bags and do a complete chemical analysis.

After selecting the first bag, Agent Baxter “separated it from the packaging material, [and measured the] weight o[f] that material[.]” which was “379.21 grams.” Next, she performed “a macroscopic [examination]. . . for particular characteristics. [She] then did a microscopic examination of the material[.]” Subsequently, she performed “a Duquenois-Levine color test” and “receive[d] a positive indication[.]” Based on her analysis, Agent Baxter concluded that the substance was marijuana.

Regarding analyzing the two other samples, Agent Baxter testified that she applied the same procedures she used to analyze the first sample:

Once again, I separated it from its packaging material to obtain that net weight. I visually observed the material, did a microscopic examination as well as the chemical test that I performed[.]

Agent Baxter concluded that, based on her analysis, the substance tested in each of the bags was marijuana.

Agent Baxter's testimony established that the principles and methods she employed were "applied . . . reliably to the facts of the case[.]" per Rule 702(a)(3). Therefore, the trial court did not abuse its discretion by admitting her testimony.

III. Conclusion

Agent Baxter's testimony was "the product of reliable principles and methods" "applied . . . reliably to the facts of the case[.]" which satisfied the two challenged prongs of the reliability analysis under Rule 702(a). Defendant has failed to show the trial court abused its discretion in admitting Agent Baxter's expert testimony identifying the substance as marijuana. *McGrady*, __ N.C. at __, __ S.E.2d at __, 2016 N.C. LEXIS 442, at *22. Therefore, we conclude defendant received a fair trial, free from error.

NO ERROR.

Judge TYSON concurs.

Judge HUNTER, JR. concurs in a separate opinion.

HUNTER, JR., Robert N., Judge, concurs in a separate opinion.

I concur in holding the trial court did not commit error, but write separately to briefly discuss difficulties this Court faces in reviewing *Daubert* challenges on appeal.

Our Supreme Court and legislature have held North Carolina is a *Daubert* state. *See State v. McGrady*, ___ N.C. ___, ___, ___ S.E.2d ___, ___ (72PA14 2016). Our trial courts are bound to follow *Daubert* and its related guidance. At the present, trial courts are not required to make findings of fact or conclusions of law when they accept or reject an expert witness. With the advent of *Daubert*, this is problematic to appellate review. *See State v. Walston*, __ N.C. App. __, ___, 780 S.E.2d 846, 862 (2015).

To utilize an expert witness in North Carolina, the moving party must show the witness’s expertise puts the expert in a better position to have an opinion on a given subject than the trier of fact. *See State v. Goode*, 341 N.C. 513, 529, 461 S.E.2d 631, 640 (1995). The movant must show the witness is “qualified as an expert by knowledge, skill, experience, training, or education . . .” N.C. Gen. Stat. § 8C-1, Rule 702(a) (2015). Then, the movant must follow the three-part framework of Rule 702 and show the testimony is based up sufficient facts or data, is the product of reliable principles and methods, and the expert witness applied the principle and methods reliably to the facts of the case. *Id.* At issue in the case *sub judice*, the reliability prong poses procedural challenges for this Court’s appellate review.

Because the substantive rule has an extensive history in federal law, our courts would adopt the federal procedure found in federal courts. However, the United States Circuit Courts of Appeal do not agree on the issue of whether a trial court must conduct a formal *Daubert* hearing when it applies the sufficiency and reliability factors in Rule 702. Circuits that allow a trial court to forego a *Daubert* hearing suggest a trial court can conduct a *voir dire* examination of the witness or allow the movant to establish a foundation on direct examination or through affidavits and expert reports. See *In re Hanford Nuclear Reservation Litigation*, 292 F.3d 1124, 1138–39, (9th Cir. 2002); *United States v. Glover*, 479 F.3d 511, 517 (7th Cir. 2007); *Hoult v. Hoult*, 57 F.3d 1, 5 (1st Cir. 1995) (“[W]e assume that the [trial] court performs [the *Daubert*] analysis *sub silentio* throughout the trial with respect to all expert testimony.”); *United States v. Lacascio*, 6 F.3d 924 (2d Cir. 1993); *United States v. Johnson*, 488 F.3d 690, 697 (6th Cir. 2007). The other circuits that require a formal *Daubert* hearing face a nuanced procedural challenge—whether an *in limine* hearing is required when there is a material dispute as to the expert’s reliability. See *Seaboard Lumber Co. v. United States*, 308 F.3d 1283, 1302 (Fed. Cir. 2002); see also *Padillas v. Stork-Gamco, Inc.*, 186 F.3d 412, 418 (3d Cir. 1999). Of the two lines of cases, the United States Supreme Court generally supports a trial court’s procedural discretion in conducting a *Daubert* inquiry. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999) (“[W]e conclude that the trial judge must have considerable leeway in

deciding in a particular case how to go about determining whether particular expert testimony is reliable. That is to say, a trial court should consider the specific factors identified in *Daubert* where they are reasonable measures of the reliability of expert testimony. The trial court must have the same kind of latitude in deciding *how* to test an expert's reliability, and to decide whether or when special briefing or other proceedings are needed to investigate reliability, as it enjoys when it decides *whether or not* that expert's relevant testimony is reliable.”).

However, parties may wish to build a record to contest specific findings when an expert is accepted or rejected. In civil trials parties may move to amend a trial court's findings of fact pursuant to N.C. R. Civ. P. 52(b), request specific findings on a witness's qualifications through an objection pursuant to N.C. R. Civ. P. 46(a)(1), or provide an offer of proof outside of the presence of the jury when their witness is excluded as an expert, pursuant to N.C. R. Evid. 103(a)(2). However, this leaves parties in criminal trials with no procedural mechanism to compel the trial court to make findings of fact or conclusions of law regarding its acceptance or rejection of an expert witness. This also creates the possibility of a silent record when parties stipulate to an expert's qualifications and/or reliability, and the movant fails to provide an offer of proof for the record to show its witness meets the *Daubert* requirements.

Given these federal distinctions, one model for procedure is to import the Rule 404(b) procedure in Rule 702. Under Rule 404(b), if a party fails to challenge the admissibility of evidence through a motion *in limine*, but does raise the issue at trial, the trial court holds a *voir dire* hearing. See, e.g., *State v. Beckelheimer*, 366 N.C. 127, 131, 726 S.E.2d 156, 160–61 (2012). At this hearing, the trial court conducts a five part analysis: (1) whether there is sufficient evidence the party committed the act; (2) whether the evidence serves a proper purpose; (3) whether the evidence is sufficiently similar to the act in question; (4) whether the evidence and act in question are temporally proximate; and (5) whether the evidence survives the Rule 403 balancing test. See *Id.*; see also *State v. Oliver*, 210 N.C. App. 609, 613, 709 S.E.2d 503, 506 (2011). Then the trial court must make formal findings and note its findings for the record. See *State v. Smith*, 152 N.C. App. 514, 528, 568 S.E.2d 289, 298 (2002) (presumed error when the trial court does not note Rule 403 analysis on the record); *State v. Washington*, 141 N.C. App. 354, 540 S.E.2d 388 (2000) (no error when the trial court demonstrates a Rule 403 analysis in its ruling); *State v. Rowland*, 89 N.C. App. 372, 383, 366 S.E.2d 550, 556 (1988) (holding 404(b) evidence is inadmissible when a trial court fails to make findings of admissibility under Rule 404(b)).

Accordingly, best practice dictates parties should challenge an expert's admissibility through a motion *in limine*. In the event a trial court delays its ruling on the matter, or in the event a party fails to raise the challenge until the expert is

called upon at trial, our trial courts should afford parties a *voir dire* hearing to examine the witness and submit evidence into the record, which this Court can review on appeal. Lastly, in ruling on the expert's admissibility, the trial court should identify the *Daubert* factors and make findings of fact and conclusions of law, either orally or in writing, as to the expert's admissibility.

Here, the State provided sufficient evidence to show Agent Baxter met all the *Daubert* requirements. I concur in holding the trial court did not commit error.