IN THE COURT OF APPEALS OF THE
STATE OF OREGON

STATE OF OREGON,
Plaintiff-Respondent,
v.
ROBERT JOSEPH EATINGER,
Defendant-Appellant.

Multnomah County Circuit Court
15CR38602; A160913

Adrienne C. Nelson, Judge.

Argued and submitted May 30, 2017.

Andy Simrin argued the cause for appellant. Also on the brief was Andy Simrin PC.

Jordan R. Silk, Assistant Attorney General, argued the cause for respondent. Also on the brief were Ellen F. Rosenblum, Attorney General, and Benjamin Gutman, Solicitor General.

Before DeHoog, Presiding Judge, and Hadlock, Judge, and Powers, Judge.*

DEHOOG, P. J.

Reversed and remanded.

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* Powers, J., *vice* Sercombe, S. J.

DEHOOG, P. J.,

A jury found defendant guilty of driving under the influence of intoxicants (DUII), ORS 813.010(1),[1] after hearing an officer describe defendant's performance on field sobriety tests (FSTs); those tests, the officer explained, were scientifically validated and "the product of scientific research." On appeal, defendant assigns error to two of the trial court's rulings concerning that testimony. Each assignment—one challenging the court's denial of his motion to strike testimony and the other challenging the court's admission of further testimony—raises the same question: whether that testimony was scientific evidence requiring a foundation satisfying the *Brown*/*O'Key* standard under OEC 702.[2] Defendant contends that the officer's testimony was scientific evidence and that the court erred in failing to require the state to lay a sufficient foundation for that testimony. The state responds that the court did not err, because it did not admit the officer's testimony as "scientific" evidence; rather, it contends, the trial court allowed him to testify only as to the "historical fact" that the FSTs were developed through scientific research. We conclude otherwise. Under the specific circumstances of this case, the officer's testimony regarding the FSTs and their scientific underpinnings was scientific because it purported to draw its convincing force from principles of science. Because the state presented the officer's testimony without laying an adequate foundation for it, the court erred in denying defendant's motion to strike and in admitting the challenged testimony. Furthermore, that error was not harmless. We therefore reverse and remand.

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[1] ORS 813.010 and ORS 801.272, among other statutes, have subsequently been amended to include references to cannabis. *See, e.g.*, ORS 813.010(1)(b) (2010), amended by Or Laws 2017, ch 21, § 80; ORS 801.272 (1999), amended by Or Laws 2017, ch 21, § 74. Because those changes have no effect on our analysis, we reference the current statutes throughout this opinion.

[2] *State v. O'Key*, 321 Or 285, 899 P2d 663 (1995); *State v. Brown*, 297 Or 404, 687 P2d 751 (1984). OEC 702 provides:

> "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."

The so-called "*Brown*/*O'Key*" factors and the foundational requirements that those cases establish for scientific evidence are set out below. 298 Or App at ___.

When we review a trial court's evidentiary ruling, we do so in light of the record that was before the court at the time of the ruling. *State v. Brumbach*, 273 Or App 552, 553, 359 P3d 490 (2015), *rev den*, 359 Or 525 (2016). When evaluating whether the erroneous admission of evidence was harmless, we consider all pertinent parts of the record. *Id.* at 553-54.

At trial, the state presented evidence that, at approximately 10:00 p.m. on September 7, 2015, Officer Scott of the Portland Police Bureau Traffic Division pulled defendant's car over after detecting defendant's speed to be 45 miles per hour in a posted 25 miles-per-hour zone. When defendant rolled down his window, Scott immediately smelled a strong odor emitting from the car that Scott associated with alcohol. In response to questioning from Scott, defendant acknowledged having had a glass of wine with dinner and a mixed drink a couple of hours before that. Scott noted that defendant fumbled in producing his driver's license, that his speech was slurred, and that his eyes were bloodshot and watery. Defendant also appeared dazed and disoriented, and he was slow to respond to Scott's questions. As a result of his observations, Scott concluded that defendant appeared to be intoxicated.

Scott asked defendant to perform FSTs. As defendant stepped out of his car, he walked very deliberately, and he swayed noticeably when he stood. During the first FST, the horizontal gaze nystagmus (HGN) test, Scott observed four out of that test's six possible clues of intoxication. During the walk-and-turn test, defendant was slow, stepped off line to maintain his balance, missed placing heel-to-toe numerous times, used his arms for balance, and failed to take the turn as instructed. Finally, during the one-legged-stand test, defendant again used his arms for balance, swayed noticeably, and put his foot down three times.

Based on defendant's performance on the FSTs and Scott's earlier observations, Scott arrested defendant for DUII. At the police station, defendant submitted to a breath test that produced a final test result indicating a 0.06 percent blood alcohol content (BAC). At that time, which was approximately 10:45 p.m., defendant reiterated that he had

had a glass of wine and a Manhattan that evening between 7:00 p.m. and 9:15 p.m. When asked to rank his level of intoxication on a scale of one to ten, defendant responded "two."

At trial, Scott was the only witness. Defendant's challenges on appeal both relate to Scott's testimony. Although defendant raises two assignments of error, the rulings that he challenges—the denial of his motion to strike testimony that Scott had given and the subsequent admission of additional testimony—both resulted from one protracted colloquy between the parties and the court. Moreover, as noted, both assignments of error present the same legal question: whether it was error for the trial court to permit Scott to testify that the FSTs are scientific in the absence of a foundation for scientific testimony.

At the outset of his testimony, Scott explained that he had been a police officer with the traffic division for 14 years, and that his "specific function" was "to investigate DUI drivers; to go out and make traffic stops to try to find impaired drivers." According to Scott, he had received basic standardized FST training at the police academy, as well as field training with the traffic division that included DUII stops. He later attended standardized FST instruction school and, as a result, is now an instructor who teaches other officers how to conduct FSTs. Scott also testified that he had attended drug recognition school, had become a "drug recognition expert" (DRE), and, as he had with regard to FSTs, had ultimately gone to DRE-instructor school. After explaining the purpose of FSTs and discussing some of the more common physical and mental symptoms of alcohol intoxication, Scott agreed with the prosecutor that he was "fairly familiar with literature and the scientific nature of how alcohol reacts once it's in the body," but acknowledged that he was not a forensic scientist. Scott testified at some length without objection as to the absorption of alcohol into the blood stream, its effect on the central nervous system and the initial deterioration of fine motor skills, including speech, its progressive influence on larger muscle groups and resulting issues with balance and coordination, and related matters.

Scott also was permitted to testify that, once alcohol reaches the blood stream, "enzymes in the liver start to filter it out and break it down," resulting in dissipation of blood-alcohol levels at a typical rate of ".15 [*sic*] percent per hour." However, when the prosecutor asked Scott how long it takes for the body to absorb the alcohol in a single drink, defense counsel objected, stating, "I let it go for a little bit on absorption/dissipation; that's common knowledge, but if it's going to get any more technical than that, I'd respectfully object." The trial court sustained that objection.

When Scott resumed his testimony, he began to explain how officers use FSTs during DUII investigations and, specifically, "how [they] interpret the results or the clues and what those clues mean as far as the reliability of that test that the person is over a 0.08 or is impaired." Defense counsel again objected and moved to strike that testimony. Following a discussion outside the presence of the jury, in which Scott acknowledged having cited certain National Highway Traffic Safety Administration (NHTSA) studies that equated various FST "clues" with specific BACs, the court instructed him to "stay away from talking about the studies." The court admonished Scott, "That's not your area. You need to talk about your observations." Furthermore, when the jury returned, the court gave the following instruction:

> "So ladies and gentlemen, you are to strike any reference to any scientific studies that correlate [to] any type of activity. The officer is going to testify from only his knowledge and observation. And so that portion of his testimony is stricken."

Later, however, when Scott testified about defendant's performance on the walk-and-turn test, the prosecutor asked him what the significance is of a suspect raising his arms. Scott began to respond, stating, "It's just an indicator. These are all clues when they do the scientific validation and the training for me—," but defense counsel interjected, moving to strike that response. Following that motion, the parties and the court engaged in a lengthy discussion outside the presence of the jury:

"[DEFENSE COUNSEL]: Judge, this is one—I think you've already ruled on this, so I don't think—I don't have much to say. I just would like the officer to not, during talking about the walk-and-turn and one-legged-stand to not try to give it the imprimatur of science. I think you already sustained that objection.

"THE COURT: I did. Yeah, I don't think that he'll do that. He was right here and understanding. Go ahead.

"[PROSECUTOR]: Your Honor, we would be asking—I would ask the witness whether or not these tests were validated. Like how the tests were come up with and if there is scientific validation.

"THE COURT: So that—no, no, no. The answer's no."

The state clarified that it had no intention of having Scott equate defendant's performance on any of the FSTs with a specific BAC, then proceeded to explain what it did intend to have him discuss:

"[PROSECUTOR]: We're saying he demonstrated these clues as evidence of impairment and that those tests were scientifically created tests, that they weren't just some randomly generated tests, that there is some science behind the methodology of the test, but that we're not trying to link a BAC to the performance of the test. And I believe that was the ruling Your Honor made earlier ***. ***

"THE COURT: This is what he's not going to be able to do. He's not going to be able to give off the impression that somehow—he can't bolster the test essentially. He can talk about what happened, but I don't know if in light of what [defense counsel] raised as a concern, that he then gets to say that it was a scientific test. It's the same thing; it's almost vouching if I'm understanding what the argument is.

"[DEFENSE COUNSEL]: Yeah, I'd say vouching plus *O'Key*, Your Honor. Thank you.

"THE COURT: Well, the *O'Key* I do—so do you understand what he's saying? They can't—even though an officer may have had training, that's fine for them to talk about what—how they were taught how they administered the test. But they can't say that it's scientific and that it's valid

> because they're not scientists and they don't have that background.
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> "[PROSECUTOR]: Well, Your Honor, in this case, I mean we could lay the foundation with the witness. ***
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> "THE COURT: But that doesn't mean that he has a science background. The training is fine. I'm saying that he's not necessarily going to be able to say that these are scientifically valid. The rest of it is perfectly fine."

After further argument by the state, during which the state contended that Scott's "specific and particularized training he's received[,] which includes scientific training on the nature of BAC uptake [and] on the nature of performance of FSTs," qualified him to give the proffered testimony. In response, the trial court suggested that the state might want to proceed with an OEC 104[3] hearing to establish Scott's qualification to testify to those matters. The state agreed.

During the ensuing hearing, Scott described in greater detail his training and the curriculum he had been taught in connection with DUII and related investigations. He reiterated that, while at the police academy, he had received 24 hours of standardized FST training, which included participating in two "wet labs"—scored practice sessions involving the administration of FSTs to intoxicated volunteers—and added that he participated in a four-hour refresher course every year. To become an instructor, as he had in 2012, "[t]hey have you do a wet lab where you're observed by other instructors to show that you have very good proficiency." Under the applicable rating system, "you basically have to do the test flawlessly and you have to teach part of the curriculum in front of the instructors in order to be recommended to be an instructor by the panel."

Scott also explained that the curriculum he had been taught and now teaches himself is a NHTSA product; it is NHTSA's "standardized field sobriety test curriculum." Scott further explained that the "curriculum is all from NHTSA and those are the tests that went through the

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[3] OEC 104(1) provides, in relevant part, that "[p]reliminary questions concerning the qualification of a person to be a witness *** or the admissibility of evidence shall be determined by the court[.]"

validation process and standardization." He continued as follows:

> "[PROSECUTOR]: Now can you explain a little bit more about that validation process and the standardization?
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> "[SCOTT]: It started in the '80s where they put these through field studies. They did them in Colorado. They did one in California.
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> "[PROSECUTOR]: Are you familiar with the science behind these tests and the field studies?
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> "[SCOTT]: I know how the studies were conducted based on what I've learned from going through the school. I obviously wasn't involved or wasn't there for the validation studies; that was before I was a police officer. But that's where they got the standardized clues and the number of clues that indicate impairment was from those validation studies. And there were a couple of studies. One was done when the legal limit was a .10 and they did some more studies in San Diego afterwards once the legal limit went down to a .08 nationally. So that's why there are multiple studies to determine whether they were still valid for the lower BAC.
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> "[PROSECUTOR]: Now as far as this training goes, is there a scientific component of it?
>
> "[SCOTT]: There really isn't a scientific component. There's some scientific principles that are given in layman's terms, but we're not—we're certainly not toxicologists. They don't teach us how the alcohol's processed through the body other than in general terms of dissipation."

Based on that testimony, the state explained that it was not offering Scott as an expert on toxicology. Rather, the prosecutor told the court, the state was offering Scott as "an expert for the purpose of describing this test and describing how they were validated." After hearing further argument regarding the import of *State v. O'Key*, 321 Or 285, 899 P2d 663 (1995), the court ruled:

> "For the limited purpose of what the State has said they wanted to ask that question, I'm going to allow it. I don't think that that's at odds with *O'Key*. They're not saying that it's a scientific, and that he's a scientist, and that

> there's scientific basis. So I'm going to allow that narrow question and that only."

The court further clarified, "And so I'm not going to strike." Thus, although the trial court had initially ruled that Scott could *not* testify that "there is scientific validation" behind the FSTs—and seemingly understood that the state would not be asking Scott to testify that "there's [a] scientific basis" to them—the court ultimately denied defendant's earlier motion to strike, thereby *allowing* Scott's testimony indicating that the FSTs were scientifically validated. That denial of defendant's motion to strike is the basis for his first assignment of error.

Scott then resumed his testimony before the jury. At the conclusion of Scott's testimony about defendant's performance on the FSTs, the state asked, "Now all of these tests that we've been talking about, are these tests the product of scientific research?" Scott responded, "They are." That statement is the basis of defendant's second assignment of error.

We turn to an analysis of both of defendant's assignments of error and the common issue that they present regarding Scott's testimony and whether it was scientific, after which we proceed to assess the sufficiency of the state's foundation for that testimony. We start, however, by briefly reviewing the nature of a DUII prosecution and the means of establishing that a suspect is guilty of DUII.

In relevant part, ORS 813.010(1) provides:

> "A person commits the offense of driving while under the influence of intoxicants if the person drives a vehicle while the person:
>
> "(a) Has 0.08 percent or more by weight of alcohol in the blood of the person as shown by chemical analysis of the breath or blood of the person made under ORS 813.100, 813.140 or 813.150; [or]
>
> "(b) Is under the influence of intoxicating liquor[.]"

Thus, to establish an alcohol-related DUII, the state must prove either that the driver had a blood-alcohol content of 0.08 percent or higher or that the driver was impaired to

a perceptible degree while driving. *State v. Mazzola*, 356 Or 804, 812-13, 345 P3d 424 (2015) (citing ORS 813.010 (a)-(b)). One method of detecting probable impairment from intoxicating liquor is through the application of FSTs. ORS 801.272.[4] In this case, defendant does not challenge the admission of Scott's testimony regarding defendant's performance on the FSTs. Rather, as he did at trial, defendant challenges the court's rulings that, in his view, allowed the state to bolster Scott's FST-related testimony by giving it the imprimatur of science without requiring a *Brown/O'Key* foundation, as defendant contends was required under the circumstances.

The threshold question is, of course, whether Scott's testimony constitutes "scientific" evidence such that a *Brown/O'Key* foundation was required. Only if Scott's testimony was scientific could the trial court have erred in admitting the testimony without that foundation. We review both questions—whether the evidence is "scientific," and, if so, whether it is admissible—for legal error. *State v. Wilson*, 266 Or App 286, 291-92, 337 P3d 948 (2014). The salient rule of evidence, OEC 702, which governs the broader question of when "expert" testimony is admissible, provides:

> "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."

Thus, by its terms, OEC 702 addresses both evidence that is "scientific"—and so subject to the heightened *Brown/O'Key* foundational requirements—and evidence that is *not* scientific, and therefore subject only to a requirement that it be presented through an expert witness, *i.e.*, a person whose "knowledge, skill, experience, training or education" renders him or her qualified to testify authoritatively on a subject.

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[4] ORS 801.272 provides:

> "'Field sobriety test' means a physical or mental test, approved by the Department of State Police by rule after consultation with the Department of Public Safety Standards and Training, that enables a police officer or trier of fact to screen for or detect probable impairment from intoxicating liquor, cannabis, a controlled substance or an inhalant, or any combination of intoxicating liquor, cannabis, a controlled substance and an inhalant."

In this case, the trial court appears to have understood the FST evidence to involve "technical or other specialized knowledge" requiring testimony from a qualified expert, but, despite Scott's agreement that the FSTs were "the product of scientific research," not to have recognized his testimony as scientific, as defendant asserts it to be. Notably, in *O'Key*, the Supreme Court acknowledged, as it had a decade earlier in *State v. Brown*, 297 Or 404, 687 P2d 751 (1984), the challenges a court faces in making that distinction: "[I]t is difficult to set a *** definitive boundary between 'scientific' evidence and 'technical or other specialized knowledge,' which are the other types of evidence requiring expert proof." 321 Or at 291 (quoting OEC 702). In fact, "'[m]ost expert testimony rests at least partly on science.'" *Id.* (quoting Christopher B. Mueller & Laird C. Kirkpatrick, *Modern Evidence* § 7.8, 990 (1995)). As we have repeatedly emphasized, however, the key question in determining whether proffered testimony is "scientific" evidence requiring a special foundation is "'whether the expert's assertions possess significantly increased potential to influence the trier of fact as scientific assertions.'" *State v. Rambo*, 250 Or App 186, 193, 279 P3d 361 (2012), *rev den*, 353 Or 203 (2013) (quoting *State v. Marrington*, 335 Or 555, 562, 73 P3d 911 (2003)); *see also State v. Evensen*, 298 Or App 294, 317, ___ P3d ___ (2019) (rejecting argument that testimony was scientific when it was not "presented in a way that would have led the jury to 'accord[] the testimony the persuasive value of scientific principle'" (quoting *State v. Henley*, 363 Or 284, 303, 422 P3d 217 (2018) (brackets in *Evensen*))).

Furthermore, recent case law has made clear that the "scientific" quality of evidence—that is, its tendency to "draw[] its convincing force from some principle of science, mathematics and the like," *Brown*, 297 Or at 407—may be express or implied. As the Supreme Court explained in *Henley*:

> "Expert evidence is 'scientific' under OEC 702 when it is expressly presented to the jury as scientifically grounded ***. Expert evidence also is 'scientific' under OEC 702 when it draws its convincing force from some principle of science, *** or implies a grounding in the methods and

> procedures of science, and would likely be perceived by the jury as imbued with the persuasive appeal of science."

363 Or at 301 (internal citations and quotation marks omitted); *see also Evensen*, 298 Or App at 313 (quoting *Henley*).

We turn to the evaluation of Scott's testimony with those principles in mind. As it did at trial, the state argues on appeal that Scott's testimony was not "scientific." In accepting that argument, the trial court appears also to have implicitly adopted the state's reasoning, which was (and remains on appeal) that Scott was merely testifying as to "historical fact," evidence that Scott's training and experience qualified him to present. We, like the Supreme Court, recognize that the line between expert testimony based on training and experience and expert testimony that is scientific can often be difficult to draw. As we explained in *Rambo*, however,

> "[a]lthough the line we draw may be fine, it is not artificial. Specialized expert opinion evidence based on a witness's training and experience draws its force from that training and experience, but not necessarily from the mantle of science. Unlike in [*State v. Aman,* 194 Or App 463, 95 P3d 244 (2004), *rev dismissed as improvidently allowed*, 339 Or 281 (2005)] and *Marrington*, here, the officer did not—apart from his reference to independently admissible scientific tests—rely on the vocabulary of science, nor did he suggest that his conclusions had been reached through the application of a scientific method to collected data."

250 Or App at 195 (upholding trial court's admission of officer's opinion testimony, based upon incomplete DRE protocol, that the defendant had driven under the influence of a controlled substance, as that opinion was based upon the officer's training and experience, not the scientific underpinnings of the DRE protocol).

Relying on the distinction that we had drawn in *Rambo*, we held in *State v. Beltran-Chavez*, 286 Or App 590, 616, 400 P3d 927 (2017), that the trial court had erred in admitting, without requiring a *Brown*/*O'Key* foundation, an officer's opinion that the defendant had "failed" one or more of the FSTs. We recognized that

> "certain officers may be practical experts in recognizing intoxication, and, when they are, they may offer expert opinions on that topic without first showing that the process by which they arrive at their opinions is scientifically valid, provided that their testimony does not imply that it is based on science."

Id. at 604. That, as the defendant conceded on appeal, rendered admissible the officer's testimony regarding his observations of the defendant's performance on the FSTs. *Id.* at 616. However, when it came to the question whether the defendant had "passed" or "failed" those FSTs, we reached the opposite conclusion. Because that testimony relied on more than just a common or even a specialized understanding of the signs of intoxication themselves, and instead implied that the officer had applied a scientific method to determine whether the defendant was under the influence of intoxicants, a scientific foundation was required. *Id.* at 614-16.

Thus, had the state limited Scott's testimony to his observations of defendant's performance on the FSTs, there is little question that the admission of that testimony would have been appropriate. The state—and, subsequently, the trial court—did not, however, limit Scott's testimony in that way. And, applying to that testimony the distinction that our case law has drawn between, on the one hand, expert testimony based on training and experience, and, on the other hand; testimony that is scientific, we are persuaded that Scott's testimony was scientific. Indeed, we do not view this to be a particularly close case. Although an *implication* that an officer's testimony is "guided by principles grounded in science" may, under certain circumstances, suffice to render that testimony scientific, *see Evensen*, 298 Or App at 315 (distinguishing *Henley* partly on that basis), here, Scott *expressly* testified as to the "scientific validation" of the "clues" he had observed during defendant's performance of the FST's; he also expressly adopted the prosecutor's statement that the FSTs were "the product of scientific research." More than just implying that his testimony was based on science rather than simply his training and experience, Scott expressly—and repeatedly—made that point.

Moreover, to the extent that the state sees a distinction between testimony that the FSTs are "the product of scientific research" and testimony that FSTs themselves render a scientifically valid result, we do not share that view. That is, to the extent that the state makes a nuanced distinction and suggests that Scott's testimony regarding the scientific roots of the FSTs merely implied that the tests themselves were scientifically valid, and not that they produced scientifically valid results in defendant's case, both we and the Supreme Court have rejected such a distinction, as shown above. *See Henley*, 363 Or at 301; *Beltran-Chavez*, 286 Or App at 614-16. And, by testifying that the FSTs that defendant performed were validated by scientific research, Scott suggested that his conclusions—that defendant's performance on those FSTs indicated impairment—"had been reached through the application of a scientific method to [that] collected data." *See Rambo*, 250 Or App at 195. In short, Scott's testimony contained various qualities that, as we recognized in *Rambo* and *Beltran-Chavez*, are found in scientific testimony. Specifically, Scott implied that his testimony regarding defendant's performance on the FSTs was based on science and suggested that his conclusion about defendant's intoxication had been reached through a scientifically validated method. *See Henley*, 363 Or at 301 (evidence is scientific when it "implies a grounding in the methods and procedures of science, and would likely be perceived by the jury as imbued with the persuasive appeal of science" (citations and internal quotation marks omitted)).

We further note that this case is distinct from *State v. Rivera-Ortiz*, 288 Or App 284, 292, 406 P3d 73 (2017), *rev den*, 362 Or 665 (2018) in which we held that an officer's testimony about collision reconstruction was not scientific. In that case, it was significant to us that the officer had not stated that he had any scientific training or experience and he had not relied on any research or specialized body of literature, referred to any scientific principles, or used a vocabulary of scientific terms. *Id.* Here, in contrast, although Scott acknowledged that he did not have any scientific training or experience, he bolstered his testimony about the FSTs by implying that he had relied on the scientific underpinnings of those tests. Scott's references to the scientific research

behind the FSTs thus transformed his testimony from something which drew its convincing force from the common understanding of jurors, *see O'Key*, 321 Or at 297 (noting that FSTs—other than the horizontal gaze nystagmus test—rest on a manifestation of alcohol consumption easily recognized and understood by most people), to testimony that drew its convincing force from the principles of science. Scott's testimony was therefore "scientific."

Having concluded that Scott's testimony was scientific, we must determine whether the state laid a sufficient *Brown*/*O'Key* foundation for the trial court to admit that evidence. Trial courts fill an important role as gatekeepers, "charged with the responsibility of ensuring that proffered expert scientific testimony must be 'not only relevant, but reliable.'" *O'Key*, 321 Or at 301 (quoting *Daubert v. Merrell Dow Pharmaceuticals*, 509 US 579, 589, 113 S Ct 2786, 125 L Ed 2d 469 (1993)). To that end, the Supreme Court in *Brown* identified a number of non-exclusive factors that could affect a trial court's decision on the admissibility of scientific evidence, including:

> "(1) The technique's general acceptance in the field;
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> "(2) The expert's qualifications and stature;
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> "(3) The use which has been made of the technique;
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> "(4) The potential rate of error;
>
> "(5) The existence of specialized literature;
>
> "(6) The novelty of the invention; and
>
> "(7) The extent to which the technique relies on the subjective interpretation of the expert."

297 Or at 417. Although the factors are not meant to be a mechanical checklist of foundational requirements, it is important that there be an "analysis of each factor by the court in reaching its decision on the probative value of the evidence under OEC 401 and OEC 702." *Id.* at 417-18 (footnote omitted).

In this case, the trial court did not analyze whether the proffered evidence met the foundational *Brown*/*O'Key* requirements, most likely due to its mistaken understanding

that the proffered evidence was not scientific. Moreover, the state does not contend on appeal that the record developed at trial and in the OEC 104 hearing satisfied those requirements. In any event, we note, among other things, that Scott expressly disavowed any scientific training or qualifications and that, although Scott made vague references to NHTSA studies and other "literature" regarding blood-alcohol and FSTs, that testimony did not appear to be directed at the "existence of specialized literature" factor identified in *Brown*, nor did his testimony address any of the other factors that courts must assess under that case and *O'Key*. Thus, the trial court erred in allowing Scott to testify as he did over defendant's objection.

Despite that error by the trial court, we must affirm if the error was harmless. Or Const, Art VII (amended), § 3; OEC 103(1) (evidentiary error does not require reversal unless error is prejudicial). An error is harmless if there is little likelihood that the erroneously admitted evidence affected the verdict. *Beltran-Chavez*, 286 Or App at 617; *see also State v. Davis*, 336 Or 19, 32, 77 P3d 1111 (2003) ("Oregon's constitutional test for affirmance despite error consists of a single inquiry: Is there little likelihood that the particular error affected the verdict?"). "If erroneously admitted evidence relates to a central factual issue in the case, it is more likely to have affected the jury's determination." *State v. Whitmore*, 257 Or App 664, 672, 307 P3d 552 (2013). "Because scientifically based testimony by an expert witness has manifest potential to influence the jury, erroneous admission of such evidence weighs against a determination that the error was harmless." *Id.* at 673.

We conclude that the error in allowing Scott's testimony was not harmless for many of the same reasons we expressed in *Beltran-Chavez*. 286 Or App at 617-19. The central factual issue in this case was whether defendant was "under the influence of intoxicating liquor[.]" ORS 813.010 (1)(b). Because defendant's BAC was below 0.08 percent and the state did not pursue a *per se* theory of intoxication based on his BAC, the state was required to prove that he had been impaired to a perceptible degree while driving. *Mazzola*, 356 Or at 812-13. Defendant's performance on the FSTs, and the

conclusions Scott drew regarding defendant's intoxication from that performance, bore directly on whether defendant was under the influence of intoxicating liquor.

In holding that the trial court's error was not harmless, we are especially cognizant that scientific evidence has manifest potential to influence a jury; indeed, "that persuasive effect is the reason that scientific evidence must meet the *Brown*/*O'Key* factors before it is admitted." *Beltran-Chavez*, 286 Or App at 617. When Scott testified that the FSTs were the product of scientific research, he presented the jury with evidence that had persuasive value apart from his observations and opinion that defendant was impaired. *See id.* at 618 (accord). And even though Scott's scientific testimony was brief, "it presented the jury with a separate, ostensibly objective, reason to believe that defendant was under the influence." *Id.* We cannot conclude that such testimony had little likelihood of affecting the verdict; accordingly, the error in allowing Scott's testimony was not harmless.

Reversed and remanded.